Educational Beginnings with Deaf-Blind Children

Second edition, Reprint

By Nan Robbins

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This book is one of a series of three written by Nan Robbins of the staff of the Department for Deaf-Blind Children at Perkins School for the Blind. The price is two dollars each, or five dollars for the set of three.

No. 21—EDUCATIONAL BEGINNINGS WITH DEAF-BLIND CHILDREN (2nd Edition)

No. 22—SPEECH BEGINNINGS FOR THE DEAF-BLIND CHILD—A Guide for Parents

No. 23—AUDITORY TRAINING IN THE PERKINS DEAF-BLIND DEPARTMENT

A color sound motion picture CHILDREN OF THE SILENT NIGHT showing the work of the Perkins Deaf-Blind Department is also available. The film is 27 minutes in length and may be borrowed for occasional use without charge. Prints may be purchased for permanent possession at $170 each.

Foreword

The training and education of a deaf-blind child follows a pattern similar to that of an unhandicapped one. The timetable and the techniques to be used are vastly different. Much that is normally done by the child's mother in the home requires attention that has to be provided by people with special training in a suitably-organized environment.

This, then, is not a treatise for parents but for educators. Sophisticated parents may find parts of it helpful, but it is not intended as a guide for their instruction.

Miss Nan Robbins has been a member of the Department for Deaf-Blind Children at Perkins since September 1957. She is assigned full-time to the preparation of curricula. This volume is the first of several planned to cover the educational development of children who are both deaf and blind.

May 1960 EDWARD J. WATERHOUSE, *Director*

A second edition of this booklet has been made necessary because of the interest taken in it. A further development of its subject matter is in preparation by Miss Robbins, and we hope this will be available later this year.

March, 1964 E. J. W.

Thus a child learns; by wiggling skills through his fingers and toes into himself; by soaking up habits and attitudes of those around him; by pushing and pulling his own world.

Thus a child learns; more through trial than error, more through pleasure than pain, more through experience than suggestions, more through suggestions than direction.

Thus a child learns; through affection, through love, through belonging, through doing, through being.

Day by day the child comes to know a little bit of what you know; to think a little bit of what you think; to understand your understanding. That which you dream and believe and are, in truth, becomes the child.

As you perceive dully or clearly; as you think fuzzily or sharply; as you believe foolishly or wisely; as you dream drably or goldenly; as you bear false witness or tell the truth—thus a child learns.

—Frederick J. Moffitt, *Chief*
Bureau of Instructional Supervision
New York State Department of
Education

I am beginning to suspect all elaborate and special systems of education. They seem to me to be built upon the supposition that every child is a kind of idiot who must be taught to think. Whereas, if the child is left to himself, he will think more and better, if less showily. Let him go and come freely, let him touch real things and combine his impressions for himself, instead of sitting indoors at a little round table, while a sweet-voiced teacher suggests that he build a stone wall with his wooden blocks, or make a rainbow out of strips of colored paper, or plant straw trees in bead flowerpots. Such teaching fills the mind with artificial associations that must be got rid of, before the child can develop independent ideas out of actual experiences.

—Anne Sullivan Macy

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INTRODUCTION

THEORY AND FUNCTION

INTRODUCTION

PHILOSOPHY

The existing patterns of behavior of any child are a product of a certain combination of constitutional and environmental factors—the resultant sum of which is unique and is his individuality. Very generally, our goal in evaluation and in education is to produce changes in these patterns of behavior; i.e., to bring about learning. Our method seeks to bring about these changes through manipulation of the causative factors, rather than through any attempt at manipulation of the behavior as such. The behavior is significant only as a symptom, as a guide to the basic causative factors.

Adverse constitutional factors which inhibit the child's growth are, for the most part, unalterable and should be thought of as constants which will always be detrimental to a child's learning and functioning. These include such things as native intelligence, degree and nature of sight after correction, degree and nature of hearing with maximum use of aid, extent and severity of other physical handicaps, and age at onset of the handicaps. Aids such as glasses, hearing aids and braces, and services such as drugs or physiotherapy may produce some beneficial changes in the situation but the effects of these handicaps always remain to some extent.

Adverse environmental factors can be manipulated, thus producing desirable changes in behavior. Illustrative of environmental variables are familial relationships with the child, occurrences of a traumatic nature such as hospital experiences, age at which instruction is began, the attitude of the teacher, the rapport between teacher and child, and the degree of emotional involvement developed over the years as a secondary result of the experiences which the child has had in the world. The extent to which adverse environmental conditions can be improved upon plus the severity and multiplicity of the adverse constitutional factors will determine, for the individual, the degree of behavior change (the degree of learning) possible and the rate at which the change will take place.

In order to set up an approach appropriate to a child's needs and in order to eventually estimate his potential, the totality of these constitutional and environmental factors and experiences (i.e., the balance of his assets and his liabilities) must be thoroughly examined and understood. It is this totality which determines the particular child's manner, rate, and degree of growth and learning. And in order to best help the child, we must examine all of the factors realistically in order to determine those which can be manipulated, those which cannot, and the resulting prognosis. Every deaf-blind child could benefit to some extent from a program of this type; however, some will benefit more than others.

Every normal child has the capacity for concurrent maturation of physical, emotional and intellectual processes. He functions and grows as a whole unit with every part contributing to the effectiveness of the whole and with every part having an effect upon every other part. Interference with the physical, emotional or intellectual process of maturation will have a concomitant retarding effect on growth in the others. When any type of interference occurs, the *entire* organism is affected and must make a re-adjustment. But the altered organism *as a whole* is still involved in any experience. Consequently, in planning for the deaf-blind child, our concern must be equally with every aspect of his being which contributes to his social maturation. He must be helped to grow in every possible direction.

The focus, then, in the Program is not solely or primarily the raising of intellectual status. We are concerned with the total social development of the child and, when possible, will attempt to deal with all of the factors contributing to social growth. We attempt to help him to become more active, more independent, more expressive of himself, so that he may profit as much as possible from the experiences in which he takes part. And, primarily through teacher-parent contact, we attempt to educate the parents toward a more realistic acceptance and toward a greater enjoyment of their child, thus creating a more receptive home environment for him.

For workability and clarity of goals, the Program has been divided into sections which deal separately with the facets of social development:[1] self-care, socialization, communication, motor and intellectual behavior, and self-occupation. In reality, the areas are inter-related. Growth in one facet of social development will contribute to growth in another and strivings toward a goal in one aspect of social development will usually be involved with other facets. One cannot work with one area of the child's functioning in isolation.

It seemed expedient to devise the Program with a child in mind who is primarily tactually oriented. However, in order to make the discussion as widely applicable as possible, consideration has been given also to the procedure in developing residual hearing and usable sight. Due to the variations in the combinations of handicaps, it must be left to the teacher to mold goals, methods and techniques to her child.

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[1] The organization into areas and the basic concepts of social development are adapted from the work of Arnold Gesell as set forth in *The First Five Years of Life*, Harper & Bros., N. Y., 1940 and that of Edgar Doll in *Measurement of Social Competence*, Educational Publishers, Inc., 1953.

FUNCTIONS OF THE PROGRAM

The Diagnostic Readiness Program has two functions:

1. Diagnosis and evaluation leading to recommendations for placement.
2. Training in readiness for entrance into the academic program in the Deaf-Blind Department at Perkins or into another program of its kind.

Diagnosis and Evaluation

Every child admitted into the program will follow this procedure:

1. Screening by the Evaluation Team: This initial screening will choose for trial admittance into the Program those deaf-blind children[1] of at least four chronological years who seem to have education potential[2] and who seem to have been making adequate progress in social development. The evaluation of social development and progress made since birth takes into consideration, particularly, the amount of remaining sight and the poverty or richness of the overall environmental opportunity given the child for social growth. A thorough case history will be obtained for each child and actual contact with the parents will be made, in the home environment if possible. Psychological tests will be administered whenever possible, with emphasis upon qualitative performance rather than

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[1] The National Study Committee on the Education of Deaf-Blind Children defines a deaf-blind child as "one whose combination of handicaps prevents him from profiting satisfactorily from educational programs provided for the blind child or the deaf child".

[2] A child is deemed to be potentially educable if he:

a) Can learn from instruction; profits from experience.
b) Shows transfer of learning; can generalize.
c) Shows curiosity, initiative, and has active contact with the world in some way.
d) Can be communicated with—if only just to inhibit any undesirable behavior.

In contrast, a trainable child:

a) Profits less from experience; learning is habit-training and relatively non-transferable.
b) Is more passive; has lower vitality; shows little curiosity.
c) Is not easily taught to inhibit his behavior.

upon quantitative scores. Prime importance is placed upon observations and evaluation of the performance of the child when interacting with objects and with people in the test situation, rather than upon formal testing as such.

2. TRIAL YEAR: During this trial year, effort will be directed toward providing for the child the environmental opportunity for maximal growth and expression following the developmental goals and procedures as outlined in this Program. The goal during this year is to learn as much about the child as possible and to give him every opportunity to function at his best.

3. EVALUATION FOR PLACEMENT: At the end of the year, an estimate will be made of the child's potential. His overall growth during the year will be evaluated in the light of the character and severity of his problems when he entered the Program, of the severity and multiplicity of physical handicaps involved, of the character of his home environment and the relationships with his family. The Evaluation Team in close coordination with the school psychiatrist, the teacher and attendant of the child, the social worker and the supervising teacher, will classify the children very broadly into two groups[1]—Trainable Children and Educable Children—according to the level of social competence which they will be expected to reach, and will make recommendations for placement with appropriate agencies.

PLACEMENT:

a. *Trainables:* Recommendation will be made for possible placement in accordance with the degree of trainability evidenced, the combination of handicaps present, and the facilities available to him through his home state.

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[1] The broad classification of children into these two groups—trainable and educable—has the following ultimate levels of accomplishment for each in view:

a) Educable:
  - —Can acquire a system of symbols which can be used for learning and for communication, thus going beyond the level of concrete references in the present.
  - —Will become at least a participating member of the family and possibly a participating member of the community on a low level; will be able to contribute to his own support to some degree.

b) Trainable:
  - —If any system of communication is attained, it is a meager one consisting primarily of concrete references and simple immediate directions.
  - —Will need custodial care in either an institution or in the home setting. Highest attainment will be care for his physical needs and non-creative self-occupation.

b. *Educables:* Within the limits of our physical capacity at Perkins, educable children will be retained in the readiness program and will pursue goals which are essential accomplishments for entrance into the academic program of the Deaf-Blind Department at Perkins, or will be referred to a similar department in another school of its type.

Readiness

The Readiness Program will aid each child in the areas of social growth (motor, intellectual, self-care, self-occupation, and emotional growth) so that he may grow more independent, more self-confident, show more spontaneity in self-expression and hence make the maximum use of his potential and be able to participate to his utmost capacity in the academic program and in life in general.

Listed below are the *ultimate goals of the Readiness Program* toward which each child is growing. These goals should be attained within a maximum period of two years in the Program.

1. SELF-CARE:

a. *Dressing:* Dresses self with overseeing and with some help on items such as snow pants, zippers, undershirts with twisted straps, shoes on the right feet.

b. *Eating:* Drinks from glass. Feeds self adequately with a spoon. Requires no help after the food is presented, and is not overly messy.

c. *Washing:* Washes hands and face without help, reasonably well, when instructed to do so.

d. *Toilet training:* Is trained *at least* to point at which he waits to be taken, or communicates his toilet needs in some way, and is relatively free of accidents at night.

2. MOTOR:

a. *Travel:* Walks about in familiar places somewhat purposefully.

—Uses some precaution in manner of walking—extends arms, moderate speed, etc.

—Can learn a few short, simple pathways with reasonable amount of repetition under careful direction.

b. *Manual Skill:* Has enough control over his hands to coordinate the two in simple activity.

3. SOCIAL AWARENESS:

a. Recognizes familiar people.

b. Cooperates willingly on most occasions.

c. Has the beginnings of a desire to imitate.

d. Enjoys interaction with adults and frequently seeks adult's attention.

e. Shows some spontaneity in play.

4. LANGUAGE DEVELOPMENT:

a. Displays considerable anticipatory behavior.

b. Responds to a few simple gestured (and/or spoken) directions.

c. Makes some attempt to communicate needs in a gross manner; such as pulling adult, placing adult's hand on something, pointing.

5. INTELLECTUAL ACTIVITY:

a. Is able to direct his attention more than fleetingly.

b. Beginning to imitate briefly upon request—in accordance with his general level of functioning and understanding.

c. Remembers simple things, such as certain routine, location of objects, or ways of handling certain objects.

d. Can solve simple problems encountered in everyday life, such as opening doors, finding a "dropped" object and so on.

e. Displays curiosity about his environment. Is active rather than apathetic.

f. Self-occupation (non-destructive play) is self-initiated and self-sustaining for periods of perhaps twenty minutes; i.e., amuses himself constructively when left alone.

g. Perceptual ability; orients himself to the world through one dominant sense, and is beginning to use any residual amounts of the other senses in a "pre-supplementary" manner; in other words he is becoming aware of sensations received through his other senses but has not yet begun to use them discriminatively.

A TEACHER'S GUIDE TO ACTIVITY

METHOD

PRINCIPLES

TECHNIQUES

GOALS

THE APPROACH

METHOD

Our efforts in the Readiness Program are directed toward providing for each child the optimal environmental and motivational conditions for growth and learning. Our procedure in setting up these optimal conditions is composed of the following factors as core focal points:

1. Coordination of Facilities for Maximum Understanding of the Child: The multiplicity of disabilities which are encountered in any one of these children presents quite an involved total picture which is especially difficult to evaluate. It is essential that the representatives of the various facilities combine their efforts and specialized knowledges for complete understanding of the child, his situation and his growth—initially and throughout the child's stay at the school. These facilities are represented by the social worker, the psychologist, the psychiatrist, the housemother, and the vital members of the deaf-blind Department—the research worker, the supervising teacher, the teacher, the attendant of the child, and the director. Cooperation between the facilities and understanding of policy by all the representatives is necessary for the efficiency of the process.

2. Consistency of Approach: Complete cooperation, coordination and communication between every adult coming into contact with the child in one way or another is essential in order to develop as rapidly as possible, and to sustain a feeling of security and stability in the child. There must be a maximum of consistency in matters such as discipline, expectancy, demand, methods of showing approval, and so on.

This consistency is facilitated, in the beginning, through limitations in the physical area available to the child and in employing a minimum of adults to work with each individual child. The physical area and the number of adult contacts are increased as the child grows psychologically and emotionally. It is only much later that he comes to participate with other children in a group situation.

3. Building of Fulfilling Social Relationships: Every one of the children who comes into the Program has, to varying degrees, been deprived of normal emotional relationships, and, as a result, is emotionally immature. The very nature of the child's handicaps isolates him to some extent. His physical handicaps limit the number of

social contacts which he has and cause the intensity of the contacts to be deficient due to the limited means of communication. He, then, is in a very real way deprived from the beginning in his contacts with people. When a child comes to us, it is seldom that he has ever had the opportunity to participate adequately in a secure, warm, stable, enduring relationship with another person.

The entrance of a deaf-blind child into the home is a tremendous shock for the typical parent. It is a traumatic experience for which the parents are, most likely, neither emotionally nor intellectually prepared. Inevitably, feelings of inadequacy, guilt, and resentment arise which are in conflict with the feelings of parental love, responsibility and devotion. It is the balance between these opposing feelings which determines the character of the parent-child relationship.

Parental feelings of guilt, resentment and frustration may find expression in several ways:[1] a) denial of the handicap, in which case they may push the child beyond his capabilities and create such a frustrating and demanding situation for him that he develops feelings of personal inadequacy and insecurity and never measures up to his potential; b) over-protectiveness, which will result in physical, mental, emotional and social retardation of development; c) disguised rejection, resulting in fluctuation between hostility and oversolicitousness, which creates a very unstable, confusing atmosphere for the child; or d) open rejection, which is displayed in hostility and neglect, resulting in negative and aggressive social behavior of the child.

For these reasons, it is certain that some degree of emotional immaturity will be present in every child. Hence, for every child entering the Program, a beginning must be made through a one-to-one relationship with an adult. This supporting relationship is the foundation of all further learning and social experiences. The overlay of emotional distress must be evaluated and coped with before any final statement about the potential of the child can be made and before the child can begin to fulfill his potential.

4. EXTENDING OF QUANTITY AND QUALITY OF EXPERIENCES: The immediate effect of blindness, deafness, and physical deformities is to restrict the quantity and quality of possibilities for learning experiences. Any combination of these handicaps then is additively restrictive in the child's experiences with people, objects and situa-

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[1] Lowenfeld, Berthold, *Our Blind Children,* Charles C. Thomas, Springfield, Ill., 1956, Chapter VI.

tions to a staggering degree. The more multiple the handicaps, the less rich, the less active is the child's participation in the world of objects and events. The less active he becomes, the less he learns, and the more withdrawn and retarded he becomes. The factor of meager opportunity for learning experiences then is the basis of many of the child's difficulties; through this "deficient living" is produced emotional immaturity, increased asocial behavior, retardation of mental functioning, and consequent retardation in every area of functioning. Without the help and conscious guidance of another, without freedom and encouragement, the handicapped child's range of experience is not enough for normal growth at a normal rate.

This retardation is not necessarily totally irreparable. Our approach will attempt to guide the child through more of the normal childhood experiences, helping him to make associations, to understand functions and so on, in order to build a backlog of understanding for the later processes of advanced learning through symbolism and—more importantly—in order to more adequately encourage the total growth of the child. He must be brought in contact with as many and as great a variety of experiences as possible—remembering that the sensory clues he receives from the world are limited and may give him incomplete or distorted concepts. The teacher must enlarge his world in every way possible. She must introduce him to experiences, and help make the new experiences meaningful to him.

5. OPTIMAL MOTIVATION THROUGH FUNCTIONAL LEARNING: Our focus is upon functional learning—upon activity which is meaningful, useful, and understandable immediately to the child at his present level of functioning, taking into consideration his overall achievement and his achievement in each particular area of social development. Learning which utilizes life situations for material provides optimum motivation since it is more immediately rewarding. Follow the child's lead to determine those things which are most intriguing to him, those things to which he responds most rapidly, and build upon these. This type of emphasis, coupled with the motivation secured through the pupil-teacher relationship itself, will lead the child to great activity and vigor.

6. PARENTAL CONTACT AND INSTRUCTION: Parental cooperation is an essential element in the success of the entire Program. The child returns to his home for vacations and will probably return to it after his schooling for the remainder of his parents' lives. If the home situation presents an atmosphere and a point of view which is contrary to that of the school and is detrimental to the child's general well-being, and if this cannot be improved upon, the job of the

school becomes extremely difficult; every vacation will mark a regression. Consistency in handling between school and home is equally as important as consistency of handling within the school itself. It is then to the advantage of the school to help the parents to accept their responsibilities and to grow with their child. Parents can, more frequently than not, be assisted in improving their understanding of their handicapped child to some degree and can be aided in learning how best to help him. At present, this is accomplished through teacher-parent correspondence and through parent visits and conferences with the staff at Perkins.

TEACHER-PUPIL RAPPORT: EMOTIONAL CLIMATE AND GROWTH

Concern with the emotional growth of the child is the key to the success of a readiness program and to the entire social development of the child. Until the time these children come to us, it is most likely that they have experienced inconsistent, negative or oversolicitous treatment to a greater or lesser degree. Feelings of inadequacy, frustration and confusion develop in the child and behavior patterns of overt anger or withdrawal or both appear. Your foremost problem, as his teacher, is to build the child's trust and confidence in you. The child must be able to trust another before he can learn to trust himself. Maximum learning can take place only within a relationship which is satisfying to both teacher and child. It is only through a basis of security found through another human being that the child will be able to extend himself outward into his external environment freely and confidently.

It follows then that your attitude is relatively more important than any methods or materials you may use. If you do not sincerely enjoy the child and believe in his ability to change, the situation will become a hopelessly frustrating one for you—and ultimately frustrating for the child.

To originate and sustain a positive emotional climate in which the child may function at his best, he must experience, consistently, the following:

1. AFFECTION: You must show him that you like him, that you're on his side.
2. SUCCESS: He must receive enough guidance[1] so that he does not experience undue or prolonged frustration and enough to help him

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[1] Definition of "guidance": see p. 24.

achieve successful completion of an activity or task. It is only through success that one gets the impetus in self-confidence for continuing effort.

3. ACCEPTANCE: The teacher must know the child's capabilities and his limitations. She must see him realistically and plan for him accordingly. She must keep goals within his range of capability, but then also expect him to succeed within these limits.

4. APPROVAL: Approval is directive, in labelling activities which will become satisfying to him. It is organizing—and therefore security building—in bringing together activities offering the same satisfaction to him. It enables him to begin structuring his world; to lessen the chaos and confusion.

5. FREEDOM: When he is ready, he must be given the opportunity to try himself and his knowledge and capabilities. He must be permitted to express himself and his feelings, to experiment in his own way, to wander a bit where he will, to become his own personality. He must *not* be over-protected; over-protection is not in the essence of meaningful affection. Every spark of initiative and curiosity must be fostered.

In the beginning stages, you must join his side. He is away from home, probably for the first time; he is frightened and uncertain. Begin by sharing in his activities, when he will permit it, however infantile these activities may be. You must do things with him that he enjoys. You must set few limits, demand a minimum of cooperation, and not expect him to do many things which you want him to do, until he becomes a little more at home, until he begins to like you, to trust you, to see you as a friend. Only after he accepts you will he allow you to guide him.

You must help him to stabilize his chaotic world of half-impressions, of spatial and temporal confusion, and of tremendous variation in adult responses to him. You must be consistent in attitudes and responses. The physical aspects of the room should be stabilized (toys, tables, chairs, etc.); that is, objects should have permanent positions in relation to one another. A broad routine of daytime activity must be set up, so that he may grow to expect certain things to happen at certain times and find these actually to happen. For example: you should always be there to greet him when he arrives at school; greet him heartily; be with him while he hangs up his clothes and come with him to the classroom; immediately engage in a certain type of activity. As soon as possible, begin to establish some sort of sign which will indicate that you are leaving him for a period. It is frightening to be left alone without warning; try to prepare him for your temporary absence. When you join him, do so for more than a fleeting minute; do not bounce indiscriminately in and out of his awareness.

As he grows day by day in his confidence in you and in the entire school situation, routines and restricted physical and social environments should gradually be extended. However, affection, success, acceptance, approval and freedom must always be part of his life, in order for him to be happy and healthy.

You are the most important element in his life while he is away from home. You are bringing him *to* life, to experiences; you are helping him to interpret life. In order to cooperate with you to the maximum he must trust you. For a long time, it will be your approval and the satisfaction which he gets from your relationship and your enthusiasm that provides much of the motivation necessary for him to make an effort. Only later will he begin to feel satisfaction accruing from the task or activity itself.

GUIDING PRINCIPLES

MATURATION: There are natural patterns of development in physical, psychological, and emotional growth which are followed, in sequence, by every child. From our limited observations, it seems generally true that deaf-blind children grow—under ideal environmental conditions—in this same, generally predictable, orderly, step-by-step fashion. We can then profitably use the normal patterns of development as our guide to the general directions of and steps in each area of social growth. You, the teacher, must be aware of the natural sequences of growth. It is impossible for you to teach the child anything which his body is not psychologically, physically, and/or emotionally ready to cope with. If he has not grown to the point of readiness for a certain task or experience, no amount of pressure will make him capable of responding; and, in fact, pressure toward a level for which he is not ready may actually be harmful to him and cause him to withdraw or perhaps openly rebel.

MOTIVATION: Learning does not occur without motivation. There must be an inner drive which impels one to act in a situation, to be attentive. A child may be exposed to an experience, but if it holds no reward or pleasure for him, he will not profit from it. The motivation takes many forms such as desire to please another and receive their approval, or the satisfaction of a physical need, or simple fulfillment of curiosity about life, or fulfillment of a motor drive. The desire to be active, to learn, must be present.

ACTIVE PARTICIPATION: Exposure to situations is not enough. A child learns by doing, rather than by being done to. A passive attitude in a child must be overcome. He must experience interaction, active contact and give-and-take, with objects, situations, and people in order to grow and to really know.

TEACHER VITALITY: Have fun; be enthusiastic! If you aren't enjoying life, it's a certainty that you won't be helping your child to do so. Your feelings and attitudes are contagious. Foster in yourself "aliveness", interest and vitality—and, as a consequence, these feelings will be activated in your child. If you are bored, your child will be bored by you—and he cannot afford to be even momentarily bored and passive about life. If you aren't awake to the wonders of the world, to the particular wonders of a child's world, you cannot awaken your child.

INDIVIDUALIZATION: Each child is similar in basic needs and each is striving to grow toward similar developmental goals at the pre-school level; that is, toward similar levels of social development. However, the particular combination of constitutional and environmental factors making up each particular child is different. Each child varies in rate of learning, in manner of growth, in response to stimulation, in the make-up of his sensory equipment, and so on. In order to change his behavior, in order to promote learning, in order to plan for him, you must understand how, why, and when he acts as he does—and with this understanding adapt your goals, materials, and methods accordingly.

PLANNED GOALS: The complicated character of these children's problems makes the setting of goals somewhat more difficult, but it also makes it—if possible—considerably more important. In order to avoid wasting the child's precious time, goals must always be clearly in mind.

> Long-range goals: You must be aware of the general, normal patterns of development. Using this knowledge and taking into consideration the limitations imposed by the child's handicaps, you must plan long-range (perhaps six months or so) goals in each of the social areas as guides to the overall character of your work with the child.
>
> Specific goals: And you must know at any given moment exactly what your aims are in a planned situation, exactly what you are trying to develop in the child and how. If you as the teacher do not know what you are striving for in a specific, learning situation, it is highly doubtful that you can help the child to know.

INTRODUCE NEW FACTORS SLOWLY AND CAREFULLY: Because they cannot anticipate changes through communication to any great extent, changes are harder for these children than they are for normal children. They live primarily in the concrete present, and are confused and frightened by changes involving space and time. Every attempt must be made to prepare them for changes in daily activity —particularly such things as doctor visits or trips. Success will not come soon in this preparation, but the beginning should be made now.

SETTING OF LIMITS: The setting of carefully planned limits is an aid to the child in organizing his environment. Limits should be clearly defined, at a minimum, ever-changing as the needs and level of functioning of the child change, and should be consistently maintained though not inflexibly. The child must understand the limits or they have no function. Discipline should be thought of as a process of teaching, not as punishment for wrong-doing. Show him "no, you may not do this" *but* "you may do this." Emphasize the positive aspects of behavior. Evaluate the reasons for behavior. Spanking and such usually serve as an outlet for adult emotion being negative in effect, this method does not usually seem to be a reasonable, constructive effort to train the child. The goal is to elicit appropriate behavior, without violating the child's spontaneity. To be really effective, a confident relationship with the child must be built before you begin limiting his behavior.

TEACH, DON'T TEST: Never demand responses which the child cannot give. If he does not know, if he cannot perform, help him to learn how. You must provide adequate opportunity for him to learn a response, to make an association thoroughly before you demand that he give the response on his own. If he does not give the desired response upon request, and if you have good rapport with the child, then he has not yet learned it—and no amount of pressure or waiting will elicit the response. In conjunction with this, practice is only effective when each repetition is perfect.

TECHNIQUES

MEANINGFUL ACTIVITY: Time is precious to these children. At this level, work with artificial, abstract materials and situations should be at a minimum. This sort of formal work has less motivational value for the children since they have such limited language; the knowledge gained from it is of limited value to the child, having little transfer at the moment. In order to foster maximum participation through adequate motivation, stimulating materials and situations for learning should come from the actual life situations in which these children are currently involved. Help them to cope with life, to build an understanding of life, as they are living it at this minute.

GUIDANCE AND FREEDOM: Because of the sensory isolation of deaf-blind children from their environment, many of the activities which the normal child learns and experiences effortlessly through the use of his sight and hearing must be consciously taught to the deaf-blind child. Frequently, his defective sensory equipment does not permit him the necessary number of repeated experiences or even a full picture of an experience in order to permit him to develop a true concept of it or a mental pattern to imitate.

The teacher, then, must act as mediator between the child and the experience of objects and situations in the world. She must help him to make actual contact with the world. She must guide him more than is necessary for a non-handicapped child, because his deficient sensory equipment brings him only partial information. The teacher must take experiences to him, take him to experiences in order to make him aware, bring things to his attention, and often physically guide him through certain patterns of activity in order to establish them. This mediation is necessary due to the very nature of the physical problems. However, one should be very careful to guide rather than to direct.

"Guidance" implies at any given moment a maximum of self-direction on the part of the child and a minimum of teacher direction;—the balance between the two is, of course, dependent upon the actual level of learning and independence which the child has reached at the given moment. It means giving help when the child needs it and only then; it means active participation and thinking on the part of the child; it means the fostering of learning, not habit-building; it implies, for the child, the freedom to explore, to try, to fail, to succeed, to follow his own inclinations as much as is practical.

Freedom is a key word. We tend to become so concerned with encouraging communication, with expanding language through guided experiences, and with making actual contact with the child's world, that we are constantly talking to him, guiding him, showing him. By all means, talk to him, guide him, and show him—but let him breathe! Don't hover over him constantly. Give him vast opportunity to try himself independently. It is only in striking out on his own that he will really learn and gain confidence in his ability. He must try himself and each new bit of knowledge, and evaluate it for himself. It is undesirable that these children become robots; every spark of imagination, of initiative, or originality, of creativity must be fostered.

POSITIVE APPROACH: In formal teaching situations in which a specific response is desired, the teacher should never display a negative attitude at the child's failure to give the desirable, the correct response. An incorrect response—and frequently undesirable behavior in general—simply indicates a need for more help, more time, more experience with the situation. Set up situations so that he *can* respond appropriately and desirably, so that you may then reward the response and hence reinforce it. Concentrate on attempting to elicit desirable behavior so it may be rewarded—and on attempting to find ways of re-directing undesirable behavior. Attempt to keep negative reactions to his behavior at a minimum.

IMAGINATIVE REPETITION: No change in the child comes about miraculously or quickly. He must have innumerable variations of similar contacts, experiences and routines. However, repetition need not become boring if the teacher uses imagination. Doing the same things in the same way day after day kills the spirit of interest and curiosity in the child, and hence defeats itself since it causes the child to lose all motivation and produces at best a stereotyped, conditioned response.

CONSISTENCY: In order to build a feeling of security, in order to provide optimal opportunity to develop patterns of imitation, in order to build a healthy relationship, the teacher must be consistent in attitude, in carrying out limits, and in expectations. It is only through the effects of consistency in approach that the child can grow to allow himself to depend on the teacher, and hence to begin to react really constructively to life.

ROUTINE: In order to foster a sense of security and to help him to organize time in his mind, his day—at least for the first month or two—should follow a rather strict pattern in terms of general activities. The routine should, of course, be set up for the individual child according to his particular problems. By routine, we definitely do not mean a regimentation of every minute of the child's day. It only means a system of general types of events: for example, getting up in the morning, getting dressed, having breakfast, playing in the playroom for brief period, going to school, greeting teacher, having a brief period of activity with teacher, then a period of play alone, and so on. One should not set such rigid routines that the child himself grows inflexible and finds it very difficult to adjust to any deviations from the usual.

STRUCTURING LEARNING SITUATIONS: Due to the deficiency in sensory clues and, hence, in building cause and effect relationships, specific experiences should be carefully planned to make it as easy as possible for the child to attend to the important factors at hand. Extraneous environmental stimuli should be kept at a minimum until he gains greater assurance and greater knowledge of the world in general. Goals must be clearly in mind as well as a plan of how to attain the goal in the immediate situation.

PERSISTENCE: Give the child enough time and adequate opportunity to respond to a procedure, a game, a situation, directions, and so on. He may not have immediate understanding and may not show immediate active response. But he may respond if given a little more time to experience, to learn. Never force him to participate in a situation, but also do not be so easily discouraged if he does not show immediate response to a procedure. You must, of course, be careful to choose procedures, materials, or experiences which are not beyond his level of functioning. But after carefully choosing, do not try only once or twice and give up!

Teacher-pupil rapport is important

DEVELOPMENT OF PERSONAL-SOCIAL BEHAVIOR

SELF-CARE[1]

The deaf-blind child's first steps to independence will usually be in the area of self-care. He will progress gradually, with help and encouragement, from the teacher's guidance in the various activities involved to independence in one step after another until he achieves total independence in the activities—first, when instructed to carry them out, and, much later, as a regular, unsupervised part of the daily routine. The greater the loss of sight, the more carefully the child must be helped in this area. He must be shown and directed because he cannot learn effortlessly through visual imitation as does the non-handicapped child; neither does he have the advantage of verbal encouragement, stimulation and help. This whole area is, of course, a basic element in learning activity in the cottage; therefore, close cooperation and communication, involving exchange of observations and reports of progress, between attendant and teacher is essential.

Dressing

Developmental Goals:

1. Cooperates in dressing: for example, extends arms and legs, pulls coat over shoulders.
2. Takes off a few simple articles of outer clothing, such as shoes, hat, mittens.
3. Becomes interested in "helping"; places his hands on yours while you dress him, and puts on a few simple articles alone such as hat and coat.
4. Begins to dress self in morning with considerable overseeing and help on fastenings.
5. Learns associated tasks: buttoning, unbuttoning, zipping.
6. Hangs up clothes when reminded to do so.
7. Completely dresses self unattended when instructed to do so and when clothes are laid out.

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[1] *Suggested Reference:*

For a thorough discussion of the problems and progress in the areas of self-care, with reference to blind children, the teacher is referred to:

Lowenfeld, Berthold, *Our Blind Children,* Charles C. Thomas, Springfield, Illinois, 1956.

Techniques:

1. Use consistent, slow movements which the child can duplicate. He may first "watch" you perform the actions; then you guide him through the actions, gradually decreasing your aid as he takes over.
2. Stress only one small skill at a time for his learning; don't overwhelm and discourage him by asking too much at once.
3. In the initial stages, give ample praise for independent performance.
4. Be consistent in your expectations; expect him to do alone that which he can do.
5. Stress a new step when the interest is shown or when the cooperation is there.
6. Allow him the time necessary to learn these skills. He needs ample practice, help and encouragement.
7. Have a definite place for his clothes, and help him to place them there and to go get them there.

Helpful Devices:

1. Montessori Frames: May be used occasionally for practice, if the child is motivated in any way by them; a game must be made of them. They are most useful in the beginning stages of buttoning, and such, since they are sturdy.
2. Dressing large dolls may be very motivating.
3. Let the child have the opportunity to watch other children dress themselves when possible.

Washing

Developmental Goals:

1. Interested only in playing in the water; permits hands to be washed and dried.
2. Interest in faucet and stopper.
3. Finds soap, turns on water, makes washing motions but are ineffectual still; realizes the meaning of the general procedure.
4. Finds towel and makes movements appropriate to drying.
5. Dries hands independently.
6. Washes hands, with supervision over such things as turning off faucet and emptying basin.
7. Goes to bathroom alone and washes and dries hands without supervision.

Techniques:

1. A gradual reduction in assistance and guidance is made as the child takes over each of the activities for himself.
2. Objects, such as soap and towel, should always be kept in the same location.
3. See Section on *dressing* for general techniques of training in self-care.

Helpful Devices:

1. Washing large dolls.
2. Watching teacher and other children wash themselves.

Eating

Development Goals:

1. Carries spoon to mouth after adult helps him fill it.
2. Picks up glass and drinks, with guidance in replacing it on table.
3. Picks up glass, drinks and replaces it on table independently.
4. Feeds self with spoon adequately.
5. Eats with fork.
6. Communicates desire for food.

Additional Goals:

1. Chews.
2. Accepts adequate diet.

Techniques:

1. The method is the usual: gradual reduction of aid as the child gradually takes over for himself, after being guided carefully through the process over and over again.
2. Avoid surprising the child in any way in the feeding procedure: for example, do not leave him suddenly; do not shove a spoon into his mouth without giving him a chance to anticipate it; do not suddenly present a new food or new utensil.
3. The eating experience should be a pleasant one. Never show anxiety over any eating problem. Never force the child in any way. Try not to hurry him in his eating, while recognizing that the routine of a day requires some limit to the amount of time taken.
4. Give some opportunity for finger feeding.[1] This activity gives a first-hand awareness of the path food must take and of the actual process involved; the kinesthetic memory is reinforced. Also,

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[1] Lowenfeld, Berthold, *Our Blind Children,* Charles C. Thomas, 1956, p. 27.

finger feeding gives a real awareness of the true quality of foods through the direct contact. It may also be a step forward in independent eating, if the child cannot yet manipulate a spoon. He should always be permitted to touch new foods.

5. Problems of non-acceptance of proper diet and inability to chew may be symptoms of emotional difficulty and must be handled carefully. If these problems are of a severe and prolonged nature, a medical evaluation must be made as to the physical conditions present; there may be internal difficulties, poor teeth, or such. If the physical difficulties are not notable, and if the inability does not seem to be a simple learning problem, main emphasis is placed upon alleviation of the emotional causes through the teacher-child and teacher-attendant relationships rather than upon the inabilities themselves. A happy, secure child will present few eating problems.

A few specific suggestions may be made for developing the motor ability to chew after the inclination is present:

a. Never force him. Any efforts toward learning to chew should be fun, should be made into a game situation, should be carried out pleasurably, slowly and carefully.

b. Let him observe you chewing.

c. Let him put things in your mouth for you to chew.

d. Put things in his mouth; allow him to bite off a piece and spit it out.

e. Perhaps move his jaws if he will permit it.

f. Show approval at every small step of progress.

Toileting

Developmental Goals:

1. Can be "caught" by teacher on a time schedule.
2. Can be "caught" by teacher through teacher's observation of general physical signs of the child's need.
3. Shows discomfort at soiled pants.
4. Can wait until he is taken.
5. Goes by himself, if facility is easily accessible.
6. Indicates by gesture his need to go.

Techniques:[1]

1. After noting the child's needs, establish the habit of toileting at a regular time.

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[1] Moor, Pauline M., *Toilet Habits: Suggestions for Training a Blind Child,* American Foundation for the Blind, New York, 1952, pp. 5-6.

2. Be consistent in the time element and in the manner of toileting.

3. When taking the child to the toilet, try to associate some gesture or sign with the process and use it consistently.

4. Provide a comfortable toilet arrangement, such as a child's seat or a supporting stool under the child's feet.

5. May help to have toy tied to the toilet.

6. Do not leave him more than ten minutes on the toilet; otherwise he will forget the purpose and perhaps attach an unpleasant feeling to the entire process.

7. Always change soiled pants immediately, to develop a dislike for them.

8. When changing him, take him to the bathroom, so that the association of the act with the appropriate place may be begun.

9. Have easily manageable clothing to encourage self-help.

10. Accompany other children to the bathroom.

11. Accept accidents matter-of-factly. It is seldom effective to show negative disapproval.

12. Give him genuine approval when it is legitimately earned.

13. Since toilet training is against the child's natural inclination and is imposed by adults upon him, the child must have a good relationship with the adult doing the training before he is able to cooperate.

SOCIAL AWARENESS

Developmental Goals:

1. Build concept of self.
2. Responds positively to one or two closely associated people —implying recognition of these people.
3. Tolerates association with other adults when contact occurs.
4. Displays awareness of other children—passive, remote interest.
5. Initiates some interaction with closely associated adults.
6. Participates in parallel play with other children, defending his own rights but generally playing peacefully.
7. Participates somewhat actively in small group situations—in simple games and learning activities.

Notes:

A rewarding relationship with the teacher is the basis for all progress in social awareness. It is through the security of this relationship that the child's self-confidence is engendered and that an awareness of the self begins to emerge. This is strengthened by increased locomotion, which by its very nature will tend to emphasize his separateness from his environment, by a greater variety of motor activities causing him to feel his own actions and their consequences, by such activities as comparing himself to his teacher (imitating posture, feeling her nose and his, and so on), by increased variety of positive experiences in general. As he grows to expect rewarding experiences through interaction with another person, he will gradually become interested in observing the activity of others. In other words, he expands his environment outward from his teacher to include other people—first only passively accepting them and eventually interacting with them. His attention should when possible be drawn to others and to their activities, in order to compensate for the loss of visual imitation and stimulation as much as possible. The opportunity for observing and for interacting with others should be easily available to him, so that he may begin to participate in social interaction when he feels ready. Interaction cannot be forced but is a function of basic growth in all areas of social maturity. One should be aware of the developmental process so that one may foster the desire for interaction when he matures to this point.

The development of the child's world outward from himself to gradually encompass more and more human beings is essential for the development of language and communication. A desire to interact with others must be present, before any sort of communication will emerge. The more social contacts he makes, the greater the variety of experiences he encounters and the more information he has to compare and to profit from.

OCCUPATIONAL ACTIVITY (Play and Experience)

Developmental Goals:

1. Amuses self by handling objects for brief periods; his attention is absorbed by actively exploring objects, showing interest in their properties. Shows a spontaneous desire to be actively engaged at something.

2. Plays somewhat more purposefully, with more specialized concentration on the particular activity. Thoughtful exploration of the environment.

3. Is concerned with more than one object at a time and their attributes—relates one object to another.

4. Initiates his own simple activities—dolls, blocks, etc.

5. Plays among (in the company of) other children without creating undue disturbance or interfering obnoxiously.

6. Beginning to play in participation with other familiar children for brief period—in such things as doll play, circle games, tea parties—with some interaction occurring.

Notes:

Play is learning.

The type of an intensity of play is correlated to a greater degree with mental and emotional development rather than physical development. Our goal is to preserve or foster in the child initiative and spontaneity of expression in play. Play is closely interwoven with self-help, locomotion, communication, social participation, intellectual and emotional growth and overall language development. Therefore, for the most part, expansion of play activity is a reflection of progress in these areas. Given proper environmental opportunity, his play then is a reflection of his emotional and intellectual health.

There are two major considerations in aiding growth in play:

1. Make available to him a great number of conventional toys, objects, and experiences. His interests will vary as he grows; for example, in the younger stage, everything encountered is a "toy" to examine, to try out; much later he uses representational objects for dramatic play. Careful thought must be put into assembling material for the classroom; the teacher should follow the child's lead in doing so.

Types of "toys" which children are interested in at one time or another:

—Creative materials: See *Creative Growth.*

—Exploration of environmental objects: door latches, banging doors, going up and down stairs, exploring wastebaskets and drawers, crawling in boxes, water faucets, paper punches, wheels, any and every object in existence.

—Conventional push and pull toys, wind-ups, turn-the-cranks, and so on.

—Natural materials: mud, snow, water, damp sand, sticks, stones, leaves, and so on.

—Noisemakers and musicmaking toys and objects.

—Outdoor material: wagons, bikes, slides, trees, bushes, hills, and so on.

—Motor activity: running, jumping, climbing, tumbling, and so on.

—Toys representative of the environment: transportation toys, dolls, household equipment, dress up clothes. These toys require dramatization to be enjoyed, for the most part. One cannot dramatize without experience to draw from—hence this more advanced play requires a broader experience in the world.

—"Educational toys":[1] These toys seem to be of limited value to our deaf-blind children. They are of particularly limited value to those children who are totally blind since the visual experience of the colorfully completed whole is not present. These toys have an abstractness about them and are not conducive to truly creative play. *Never* should they be used as formal teaching material. The teacher may informally demonstrate the possibility of the toy in order to compensate for the child's lack of visual learning and imitation, but she must still allow him to master it for himself. If the teacher feels that he cannot do it alone and that he needs to be taught how to use the toys, then it is evident that he has not yet grown to a point of readiness for the toy. He has more living to do first.

If the child shows interest in these "educational" toys, by all means permit him to play with them, but beware of relying too greatly on these toys for his entertainment; it is actual living experiences that will benefit him most and will hold the greatest fascination for him. Educational toys are not necessary for maximum growth of the child and may actually—if the teacher leans too heavily on them—be detrimental to his growth and a retarding factor in his progress. Time spent in teaching a child to use an educational toy may be far better spent in showing him some unknown facet of the real world.

Educational toys are *Toys;* they are valuable only when played with and experimented with and learned from by the child when he has reached a level of development and a level of experience at which he is challenged by them.

2. Permit him the freedom to experiment with toys and objects as he will, using your common sense in determining when to curb destructive tendencies, when to curb perseverative behavior by

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[1] "Educational Toys": Those commercial toys such as the series of plastic eggs in which one fits inside the next, the discs of decreasing size on a peg, the "nest" of octagonal cups, bead stringing.

gently distracting the child or introducing a new stimulating possibility for him, and when to give guidance as to potentialities of the toy. The child must play as he will to experience the element of discovery and mastery over the environment. Much of the child's day should be spent in free play—after his initial curiosity about the world and his active interest is stimulated, so that his free play time is constructive and forward-moving.

A rewarding relationship with the teacher is the basis for all progress in social awareness.

MOTOR DEVELOPMENT

MOVEMENTS OF THE UPPER BODY

Goals:

1. To develop as great a variety of motor activity as possible.
2. To develop awareness of self.
3. To develop motor skills necessary for a more independent way of life.
4. To increase the quantity of sensory experiences.
5. To increase the quality of sensory experiences.
6. To develop a working concept of space.

Elements of the Program:

1. Fine Hand Skills:
   a. One hand:
      —picking up small objects
      —carrying or holding small objects
      —squeezing
      —twisting
      —turning
      —screwing
      —poking
   b. Two hands:
      —tearing
      —twisting
      —turning
      —pulling apart
      —pushing together
2. Gross Arm Movements:
   —waving arms
   —clapping
   —hitting
   —hugging
   —swinging arms
   —patting
   —picking up large objects
   —picking up heavy objects
   —pushing
   —pulling
   —throwing
   —reaching

3. Directed Movements from One Place to Another:

—Directing the movements of an object in the hand toward a part of the self. (Ex.: a cracker on the table to the mouth; a hat to the head; banging two objects together; an arm in a sleeve.)

—Using implements to move objects from a place to the self. (Ex.: taking a drink of milk; bringing food to mouth on a spoon.)

—Directing the movement of an object from one place away from self to another. (Ex.: picking soap out of water and placing in dish.)

—Using implements for other purposes. (Ex.: pounding on a drum with a stick; digging into food with a spoon.)

Notes:

Motor activity is vital to the processes involved in self-care: dressing, washing, brushing the teeth, turning doorknobs, and so on. Motor activity is the essence of sensory perception since one must look to see, touch in order to feel, and so on. The larger the repertoire of motor responses, the greater the variety of information acquired about the world and about oneself.

Because the blind child has not the visual pattern to imitate, nor the visual motivation for actions, he requires more help in establishing motor patterns; he must frequently and repeatedly be shown how. He must experience many, many different objects so that he may have occasion to try these varied motor movements. He must have freedom to explore and do things on his own. It is through this motor activity that he comes to know objects and begins to develop some control over the physical world.

These actions then should never have to be drilled in artificial situations. They are the activities of living. The teacher must only be aware of the vast number of movements possible and encourage the child in trying these and using them.

MOBILITY

Mental Orientation in Space

> . . . without an adequate space world in which to locate objects and in which to observe their relationships one with another our whole concept of external reality and causative factors in our environment would be impossible.
>
> —Strauss and Kephart

Goals:

1. To decrease his isolation by a moving outward into space—a broadening of his contact world.
2. To arrive at a greater awareness of the self as distinct and separate from the environment and as in some control over the environment.
3. To build a working concept of organized space—from which will stem a greater security and freedom in moving about and a knowledge of the relative stability and instability of objects.
4. To increase his independence in caring for and in entertaining himself.

Elements of the Program:

Developmental levels in mobility:

1. Moves about under guidance of adult—adult leading. Moves his hands and arms outward, establishing landmarks and pathways.
2. Walks about holding teacher's hand but taking the lead himself—generally rather aimless wandering and looking.
3. Leaves the side of the teacher briefly—may run after her out-stretched finger tips, or take several steps to find her in play.
4. Walks alone about room, holding on to large objects and following walls for security.
5. Moves about freely in space by any means—inching backwards on his bottom, walking on all fours, creeping—wanders about.
6. Walks about freely in space—exploring on his own.
7. Begins to build relationships in space: can find some large toys from certain locations in the room; can find way to bathroom; can locate dropped object.
8. Is aware of hazards and attempts to protect himself, to anticipate happenings, should move rather slowly.
9. Has awareness of relationships in immediate environment—following certain set pathways—can go unattended to several points.
10. Extends himself to running, jumping, and so on.

Exploration of relationships of objects to each other in space:

Encourage him to look at things from more than one point of view and in more than one way. Examples: crawling under, over and around furniture; sit on chairs and touch floor; slide from chair to floor; bang table, bang floor; open window, go outside; move objects from one place to another and find them there; finding objects dropped on floor.

Notes:

1. Objects should be kept in the same locations in order for the child to begin to organize a concept in his mind; keep, especially, large pieces of furniture in the same location; have a toy shelf; have a shelf for the blocks; and so on.
2. Always follow the same routes from place to place when the child is just beginning to move about alone. Later, intentionally encourage variation in routes to encourage a broader understanding of relationship and to avoid rigid concepts which are unsatisfactory and easily upset by the moving of an object.

Locomotion

Goals:

1. To develop awareness of self through varied motor activity.
2. To decrease his isolation by his moving outward in space.
3. To increase his sensory experiences in number and in type by broadening the sphere of his activity and his methods of contact.
4. To provide a release for energy.

Types of Movements To Be Encouraged:

1. Vertical extension into space:
    jumping
    climbing
    climbing stairs

2. Horizontal extensions:
    creeping
    crawling
    walking
    running
    somersaulting
    jumping
    rolling
    tumbling
    skipping
    hopping
    walking while carrying something

3. Projecting objects away from oneself into space:
    - throwing
    - pushing
    - pulling
    - kicking
4. Using objects as aids in movement:
    - swings
    - rocking boat
    - wagon
    - bicycle
    - slide
    - sled
    - skates
    - merry-go-round

Notes:

The typical blind child, in contrast to the normal child, does not spontaneously engage in a wide variety of movements in space. Very soon in life, he meets with bumps and falls—becomes tense and frightened and hesitant. In addition, he has less motivation to entice him to move outward in space; he does not see the ball to run after it or the enticing view from the top of a tree. He finds it safer to release his energies through the so-called "blindisms" which are rhythmic movements of parts of the body while the body remains horizontally static in space; rocking from one foot to the other, waving the arms, jumping up and down on his toes, and so on, or through the rhythmic movements on a stable axis of such equipment as the rocking boat or the swings.

The teacher must help the deaf-blind child to experience a greater variety of motor activities. He needs an outlet for energy as much as any child, and, with help, can enjoy it as much and can be stronger in body and have a wider knowledge of the world as a result of it.

Specifically, the teacher can provide frequent opportunity for him to run and play in a large area where he can move about with less fear of banging into things. She can run, hop, climb with him. She can devise simple games. She can allow him to be just as active as he will. She can teach him to throw and show him how far the object goes, how to crawl, how to turn a somersault, and so on.

DEVELOPMENT OF ADAPTIVE OR INTELLECTUAL BEHAVIOR

PERCEPTUAL TRAINING

All of our initial learning comes to us through our senses. One must first become aware of sensations and then direct one's attention to distinguishing attributes and functions in order to interpret the sensation. Attention must be directed to effects, qualities, relationships, toward a process of comparison, discrimination, awareness of similarities and differences. The process then is that of awareness of a variety of sensations which are eventually organized into a whole to which is assigned a function or meaning.

One should begin initial contact with the child by stressing activities which appeal primarily to the sense through which he acquires most of his learning; he will be predominately tactually, visually, or auditorily oriented. Then, with every child, the residual qualities of the other senses must be brought into play to supplement the information acquired—to broaden his concept of the observed object or experience, to enrich it. Every sense should be utilized to its fullest potential to give as complete a picture of the world as is possible with the inherent deficiencies present.

The material for the training, at this level, comes primarily from everyday situations rather than from structured, formal, and artificial lessons. The greatest concern at this pre-school level is not actually "training", in any formal or definitive sense, but is simply the providing of as many varieties of sensory experiences as possible for the child and, in conjunction, helping him to realize functions and causes when possible.

Our goal is the utilization and coordination of all sensory capacities remaining to the child in order to develop recognition, understanding and interpretation of stimuli and reactions appropriate to them: meaningful organization of the environment.

Tactual Experience

Developmental Goals:

1. Develop awareness of a wide variety of tactual stimuli.
2. Build discrimination between stimuli.
3. Use tactual sensations meaningfully to gain useful information about the world.

Elements of the Program:

1. Qualities to be experienced:
    a. Temperatures: hot, cold
    b. Pressure: heavy, light
    c. Resistance: hard, soft, firm, tractable
    d. Surface: rough, smooth
    e. Extension: straight, curved, square
    f. Size: large, small
    g. Vibrations

2. Object perception: recognition of meaning of function of an object by awareness of its composite of qualities as different from that of other objects.

General Statements:

1. The child must be given enough freedom and opportunity to encounter these qualities on his own, since it is through his own activity that he learns best and most rapidly, and enough guidance toward certain experiences so that he misses less of the innumerable variety of qualities in the world and learns of their potentialities and significance to him.

2. The very character of the tactual sense necessitates his moving about in space to realize the full potential of the sense; the child and the object must come in actual contact before the child can perceive. Therefore, it is clear that the development of this sense is closely interwoven with the development of independence in the motor area in general. He must move about and must use his hands meaningfully in order to broaden his knowledge of the world.

3. The greater the variety of motor activity involved in "looking at" a new object, the more knowledge will be gleaned from it. Objects can best be perceived through the use of both hands in exploration, since it is thus experienced in relation to another part of the viewer's body providing a reference point for comparison of all objects.

Types of Developmental Techniques:

1. Gross Imitation:

A child must become aware of himself before he can become aware of the world around him. Build imitation of gross movements of the body: hugging, jumping, swinging arms, beating on drum with hand, and so on.

2. EXPOSURE AND SATURATION:

Deliberately introduce the child to experiences in order to draw his attention to comparisons of objects and qualities encountered every day: fur on collars, crunchy leaves, pine needles on tree, leaves on tree, clothes teacher and child are wearing, hot and cold water when washing hands, hot stove, cold in refrigerator, and so on and on. Give him an infinite variety of experiences and point up contrasts.

3. MATCHING:

a. *Matching objects (in natural situation):*

Most efforts toward actual matching of similar forms should be done meaningfully, with immediate reward pending.

For example: 1) if he is fond of a drum, before playing with it with him, show him yours and have him find his which matches it in the group of objects on the shelf; 2) matching of parts of your body to his; 3) try on hats of many different sizes; 4) compare other items of clothing, teacher's and child's shoes and gloves; 5) find a matching ball, then play with them, and so on.

b. *Matching objects (in formal situation):*[1]

If the child seems capable and if he displays an interest, a formal, teacher-pupil, desk situation may be begun, with certain specific objects to be matched one to another; the only motivation to the child is joy in successful completion of the activity itself or in the approval received from pleasing the teacher.

This sort of formal activity is useful in preparing the child for the more formal, more abstract learning which is to come. It helps him to learn to direct his attention to a task for a brief period, to learn to look for the important details in the situation, to follow directions, and to make a beginning in skills necessary for formal speechreading practice. However, these formal exercises should be used infrequently at this level. Time is better spent in helping the child to collect real-life impressions and experiences immediately pertinent to daily living and indispensable for further growth in any area of functioning.

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[1] *Suggested Reference* for thorough explanation and procedure in formal matching exercises with suggestions for games: Lassman, Grace, *Language for the Pre-School Deaf Child,* Grune and Stratton, New York, 1950, Chapter 10.

Procedure for formal matching exercises:

1. First, match objects identical in every respect; then, perhaps, match objects differing only in size.
2. Begin with two types of objects very different from each other; when this is accomplished, eliminate one of them and introduce another type; perhaps later expanding to three.
3. Be clear about directing him in the response desired.
4. Vary the objects, after he begins to catch on, and vary the method of presentation and response. Avoid getting a stereotyped response to one set of materials, and one set procedure.
5. As the child progresses, increase the similarity of types of objects to be matched. Our goal is the refinement of discrimination, an ever increasing ability to note similarities and differences.

Types of Exercises:

1. Match objects identical in every respect: form, surface, weight, size.
   Example of beginning exercise: balls and airplanes.
   Example of more advanced exercise: cars and trucks.
2. Match objects identical in every respect except size.
   Example: small ball—large ball and small airplane—large airplane.

C. *Matching Textures (Formal Exercises):*

Some children while in the readiness program may be capable of formal discrimination exercises involving texture. For example, squares of materials may be used in matching exercises, such as silk and wool, or denim and flannel. If the child has useful vision, this sort of exercise is most useful if planned as a "hiding game", perhaps selecting the matching material by putting his hand into a bag.

D. *Vibration Awareness:*

At this level, our aim is to develop an awareness of and interest in the presence and absence of vibrations, in preparing

Different methods can be used to acquaint a child with vibrations.

for finer discrimination in the use of the Tadoma (Vibration) Technique in speech.

Types of Activities:

1. Piano: With the child's hands on the back of the piano, he is instructed to—for example—lift his hands when the music stops.
2. Balloon: Children find it fun to feel the vibrations made when the teacher makes speech sounds against the balloon, or when he does it himself. The balloon vibrates very easily and clearly.
3. Chapel organ: It may be fun for the child to experience the tremendous vibrations produced by the organ. Allow him to actually see the organ being played—and when it is not being played—so that he may associate the source with the vibrations.
4. Speech: Encourage him to "feel" speech as much as he will, giving him the opportunity to realize speech vibration and the absence of it.

Demonstrations of Functions of Objects:

One of the prime duties of the teacher is to make clear to the child—whenever possible—the function of objects which the child encounters and which he is curious about. You cannot tell him in words what an object is for, and—if he is totally blind—he may not have the opportunity to naturally experience its use, unless you deliberately show him. A demonstration of function will more certainly assure a future recognition of the object as different from certain other objects and also as similar to still other objects.

Random examples:

1. A vacuum cleaner: demonstrate picking up small bits of paper and thread.
2. Scissors: cut string which can't be broken.
3. A box: can carry many things in it instead of one at a time.
4. Umbrella: keeps you dry in the rain.
5. Tape: holds torn paper together.
6. Stapler: fastens paper together.
7. Step ladder: can reach high shelves, can reach top of door.

Auditory Experience[1]

General Aim:

To lay a foundation for the use of the auditory channel as an avenue of learning and of contact with the world to as great an extent as possible.

The actual amount and type of learning to be gained through the auditory channel will depend upon the amount of residual hearing present, the nature of that hearing, and the child's intellectual and emotional status which governs his basic ability to use effectively that remaining hearing. Three broad classifications of hearing groups may be made with indications concerning the type of functional use eventually to be expected with each:

1. 40-60 DB Loss: Some appreciation and understanding of speech and language can be learned through the use of amplification.
2. 60-85 DB Loss: The hearing remaining with this severe loss should be helpful in perceiving vowel sounds, voice quality, accent, rhythm, and inflection patterns through the use of amplification; but correct language and speech cannot be learned without special techniques.
3. 85-100 DB Loss: The child with this profound loss can "feel" sounds; he can perhaps profit by listening for rhythmic patterns including word and sentence stress, accent and inflection; this limited residual hearing is of greatest usefulness in maintaining general environmental contact rather than in any direct relation to acquisition of language or speech.

Additional Aims: To make an estimate of the child's hearing acuity and to train him in the ability to respond in audiometric testing.

Developmental Goals:

1. Focuses attention upon sound.
2. Has a pleasurable reaction to sound.
3. Can discriminate between sound and silence.
4. Reaches out toward the source of sound; i.e., is curious about sound sources.

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[1] This section is adapted primarily from: Tegeder, Robert W. and Szajna, Helen, *A Multi-Sensory Approach to Auditory Training,* The Lutheran Institute for the Deaf, Detroit, Michigan, 1956.

5. Discriminates between sounds and voice.
6. Has a pleasurable reaction to his own voice—babbles—and therefore is developing a greater awareness of himself.
7. Can discriminate between a few gross sounds.
8. Responds appropriately to some environmental sounds.

Elements of the Program:

A. GROSS SOUNDS:

1. *Saturation:* Infinite opportunities must be given for experiencing sound. Allow the child freedom to play with, to try out a variety of noise-making toys.

2. *Discriminate between the Presence and Absence of Sound:*

—Using spirited recordings, a drum beating, a horn blowing, or any other sound which can be sustained, instruct the child to perform some action only when the sound is on, such as clapping, marching, standing up, etc.

3. *Discrimination; Noisemaking Toys:*[1]

—Give the child unlimited opportunity to *play* with noisemakers.[1] He must be very familiar with the toys used to build discrimination.

—After he has become somewhat familiar with several, attempt to get him to *reach out* for it when it is sounded.

—Imitation: Attempt to have him sound his noisemaker in response to your sounding yours of the same kind.

—Beginning to build *discrimination:*[2] a) Use only two very different sounds at first; exchange one for a new one when a response is forthcoming and later perhaps increase the number to three at a time; b) Demonstrate to him over and over the desired response using at first sight, touch and hearing, and only after this attempt to elicit a purely auditory response. c) Technique: using only one toy, you sound it, then have him sound it; then, using two toys with which he is familiar, sound one and guide him to sound it; gradually decrease your guidance as he begins to grasp the idea. Give him every opportunity to respond.

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[1] List of suggested noisemakers: tom-tom, mouse, cowbell, police whistle, squeaking rabbit or doll, horn to blow, horn to squeeze, wooden clacker, tambourine, snapper, small bells, music box, siren, sand blocks, maracas, cymbals, xylophone.

[2] Suggestion for beginning discrimination exercises: tom-tom and mouse, cowbell and mouse, tom-tom and cowbell, mouse, whistle and cowbell, horn and tom-tom, horn and tambourine, horn, tambourine and tom-tom, etc.

MUSIC:

1. *Recognition of impulses: Imitation:* Have child repeat after you a rhythmic pattern on a drum.

2. *Discrimination:* Work for a response by appropriate actions to different rhythmic patterns illustrating those actions; such as running, jumping, swinging, waving arms in air, clapping. The patterns may be produced just on a drum or piano; later records may be used, but this level will usually not be reached by small children.

ENVIRONMENTAL SOUNDS:

Make use of *every* opportunity to draw attention to source of sound, and thus to the meaningfulness of everyday sounds, such as the following:

laugh
knock at door
water running
cough
stamp on floor
objects dropped on floor
clapping hands
door banging
recess bell
car horn

Attempt to make him conscious of as many environmental sounds as possible and to develop a curiosity in him about the sources of any sound of which he is aware.

SPEECH PERCEPTION: FOUNDATION OF

1. *Saturation:* Attempt to develop a pleasurable reaction to the human voice, through singing and talking to him with and without vibration, perhaps playing little singing-activity games if he is cooperative and happy about it.

2. *Discrimination:* Use the voice (talking or singing) as a gross sound in conjunction with noisemaking toys in discrimination exercises in order to build discrimination between voice and sound in general. Help him become aware of his own voice and to enjoy giving voice (see "Speech").

3. *Imitation:* Encourage him to imitate teacher's speech sounds.

Notes:

1. Nearly every child has *some* residual hearing which can be developed, if only to the point of differentiation between gross sound and silence.

2. Have short periods every day for each area of the program, a) gross sounds, b) music, c) environmental sounds, d) foundation for speech perception.

3. Activities may be carried out with and/or without amplification, depending upon the response of the child, his interest and cooperativeness, and amount of actual hearing. Use of amplification should be encouraged.

4. Develop tolerance for sound: Be careful to initially present materials or sounds with the hearing aid at intensities that are not disturbing. During the period of training, increase this intensity level gradually, and continue the process for perhaps weeks or months. Particularly children with a moderate to severe loss find introduction to amplification initially annoying and care must be taken to make amplification a pleasant experience.

5. Introduction to the earphones should be made cautiously. Do not frighten the child. Usually, a child who refuses the earphones will tolerate the teacher's holding one close to his ear as a beginning.

6. Never force any part of the training. Make the entire process a pleasant one.

7. In introductory stages of each aspect, permit the use of the combined senses, gradually working toward a pure auditory response. If this is not forthcoming, do not hesitate to return to the combined-sensory approach.

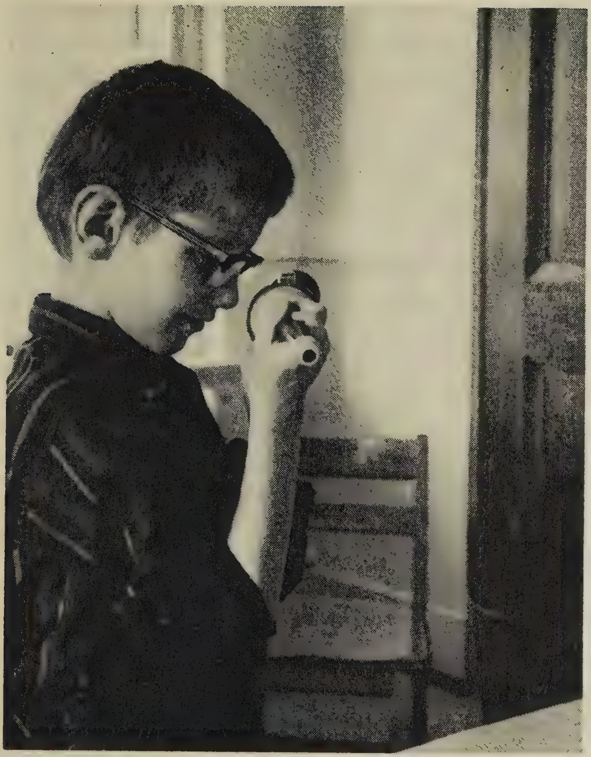
8. The training takes time and cannot be hurried. Progress with each child will vary in rapidity and in intensity and cannot be predicted.

9. When working for a specific type of response, be certain that you are making the desired response clear to the child and that it is within the range of the child's motor and intellectual ability to give it to you.

Visual Experience

Goal:

Development of the ability to use any amount of remaining vision functionally. The actual type of functional use will, of course, depend upon the amount and the character of the remaining vision. Following is a list of the types of remaining sight possible and the functional applications for which each is suited:



Sight and hearing should be developed to their fullest.

1. *Light perception:* The ability to recognize the presence of strong light, and hence to understand the meaning of "light" may be useful psychologically and may be minimally helpful in travel.

2. *Gross form perception:* The ability to discriminate grossly between large forms silhouetted against the light or generally well-lighted can be helpful in travel, and is minimally helpful in learning about the world of objects since some visual concept of size may be formed and some visual discrimination of very gross form may be possible. Is predominately tactually oriented.

3. *Good scanning vision:* The ability to perceive finer differences in form, size, and so on, can be extremely useful for general learning—for acquired general knowledge about the environment. Have little difficulty in traveling visually, and in locating objects in space. Is visually oriented but must rely some on tactual clues as supplements.

4. *"Sight saving" vision:* Can learn to use his vision to read the large sight-saving print. Can distinguish such elements as form, color and size to a rather fine degree in close contact. This child is definitely visually, rather than tactually, oriented, and accomplishes most of his learning through sight.

5. *Restricted-field vision:*

    1. "Tunnel vision": The actual central acuity may be quite good but the angle which the sight takes in at any one instance may be very small. This sort of sight has a variety of limitations. It can be essentially useful in learning about the environment but the process of learning is difficult: the child looks at the parts, piece by piece, and then in his mind organizes this into the whole. "Tunnel vision" has some usefulness in travel in the day-time, primarily in recognition of "spot-positions" rather than in actual usefulness with the overall path or avoidance of obstacles.

    2. Peripheral vision: Conversely, the child may have his best vision to the side. This is most useful in travel and has some usefulness in general learning.

SIGHT AS A VOLUNTARY SENSE:

The very nature of the sense of sight makes it somewhat difficult for the teacher to direct it or to train it. It is a voluntary sense; that is, the child can easily refuse to look, whereas he cannot so easily refuse to listen or to smell if the organs of smell and hearing are essentially functioning. Similarly, you can place an object in his hand for him to touch; he may not be paying complete attention, but some sensation is being received anyway. You cannot, in this way, cause him to have a particular visual sensation so easily. You cannot make his eyes look, as you can make his ears hear, his hands touch and his nose smell. *He* must direct his vision.

Visual Perception Requires the Integrity of the Central Nervous System:

Let us assume then that if a child has any amount of useful vision, he will "look". *But* he may not necessarily understand what he sees, or direct his vision usefully. In other words, he will receive visual stimulation but he may not be able to so readily visually perceive or interpret these sensations. The teacher's job then is to help him to "look" with greater understanding, to help him to interpret what he sees, to encourage him to look attentively and with some purpose, to encourage and aid him in making functional use of his vision.

Evaluation of Sight—Acuity and Functional Use:

In order to aid the diagnostician in his overall evaluation of the child and also to come to know how to teach the child, the teacher must—from the very moment the child arrives—attempt to estimate how much the child can see and how much he uses his sight for learning and for adjusting to the world. Notice him when he is freely playing: does he use sight in travel, what is the relative use of touch and sight in explorations of small objects, does he seem to like color, does he move toward the light if he seems to have little sight, does he enjoy the minimal visual stimulation which he receives; i.e., does he stand purposelessly in front of the light, does he react to movement from the side, and so on; does he seem to have more sight than he actually uses?

Activities: in order of development:

A. *"Saturation":* Exposure to a wide variety of experiences will give the child the opportunity to build up a fund of information from which to begin to make comparisons. Let him look. Encourage him to look. It is not time wasted.

B. *Gross Imitation:* (For additional general note on Gross Imitation and procedures and aims in matching in the formal situation, see *Tactual Experiences,* pp. 43-44.) In a manner similar to that described in *Tactual Experiences,* play games with him in imitation of gross physical movements of the body. Examples: a) Follow the leader game—involving changes from clapping to skipping to waving arms to jumping and so on; b) Matching of parts of the body: eyes, mouth, tongue, hair, arms, and so on; c) Pre-speech Exercises: Some children may enjoy and be capable of imitation of mouth and tongue movements necessary to speech;[1] examples: mouth—open wide, pucker lips, open mouth with teeth together; tongue—tongue out, in cheek, flat on bottom, up to roof, between teeth; a mirror is frequently helpful in these exercises.

C. *Matching: In Natural Situations:* There are innumerable opportunities during the day to have the child find like, or similar, objects to be used for various activities—as was described under *Tactual Experiences.* In addition, the child who has enough vision to recognize pictures may begin to match objects to pictures. For example, if the teacher wants to use the portable desk aid which is across the room, she may show a picture of it to the child and have him go get the aid. Of course, the picture must be very clear and to the point, and the picture must be associated with the object before the child can be expected to respond to the picture on his own.

D. *Matching: In Formal Exercises:*

1. FORM:
    1. Match objects identical in every respect.
       Ex: 2 cars of same type, size and color, and 2 airplanes of same type, size and color.
    2. Match objects of same form but of different size.
       Ex: 1 large green cup to 1 small green cup and 1 large green plate to 1 small green plate.
    3. Match objects of same form but of different color.
       Ex: 1 large blue block to 1 large green block and 1 large red box to 1 large yellow box.
2. COLOR:
    1. Match objects according to color but of different form.
       Ex: A blue cup and a blue ball to a blue ribbon, and a red cup and red ball to a red ribbon.
3. SIZE:
    1. Match objects according to size but of the same color and form.
       Ex: 2 big red airplanes and 2 small red airplanes.

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[1] See "Tongue Gymnastics" p. 62.

2. Match objects according to size, of the same color but of different form.
   Ex: 1 big red ball to 1 big red top, and 1 small red ball to 1 small red top.
3. Match objects according to size, with different colors and different form.
   Ex: 1 big blue sock to 1 big black shoe and 1 little brown sock to 1 little red shoe.

Notes on Presentation of Matching Exercises:

1. You must be clear in your initial demonstration of the activity and in your initial directions. The child must know what you want him to do, and you must first clearly show him.

2. Be careful not to confuse the three types of matching activities. Concentrate on achieving satisfactory discrimination of one element (form, for example) in many different ways before moving on to another element.

3. A child may be more interested in color than in form, in which case—of course—matching exercises should be first started with "color" rather than "form".

4. There is no reason to forbid the child to use exploration by touch in conjunction with these exercises. If he naturally finds tactual sensation a helpful adjunct to visual sensations, then this is his pattern of adjustment and is to be desired. This integrative use of the senses is, indeed, our goal in all training.

E. *Matching Objects to Pictures: Formal Exercises:* Some children in the Readiness Program may possibly reach this stage of development. The matching of objects to pictures of course requires a great amount of residual vision. It is the beginning stage in the transference of discrimination powers from three-dimensional objects to two-dimensional representations of them; i.e., one of the basic introductions to symbols, along with symbolic use of gestures.[1] At this stage, the pictures used for matching must be clearly defined and clearly stated; they should be of everyday objects with which the child is very familiar.

F. *Building Knowledge of Functions of Objects:* As was explained previously in reference to the tactual sense, one of the important duties of the teacher is to explain—to demonstrate—the functions of objects to the child in order to compensate for his deficient ability to learn about functions naturally and effortlessly. Give him every opportunity to use any amount of vision which remains to him in acquiring knowledge about the world—in growing to understand functions and causes.

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[1] Suggested reference for discussion of Visual Training Exercises for those who are primarily visually oriented: Lassman, ibid., chapter 10.

PERCEPTUAL TRAINING

Olfactory Experience

For the most part, development of olfactory awareness can only be aided by consciously exposing the child to olfactory experiences and by taking him to the source of the sensations whenever this is possible. The situations cannot be controlled well enough to make specific formal training practical at this level.

Suggested types of experiences: soap when washing hands, flowers outside, oranges to find in kitchen and eat, chocolate, bananas, coffee, food cooking, finger paint, perfume, and so on.

LANGUAGE DEVELOPMENT[1]

"Language" refers to all the many processes which enter into communication—including emotional outcries, facial expression, gestures, words. It is not a subject to be taught, *per se,* but is a process, with three sequential stages in its development:[2]

1. Inner Language: One first learns to think, to remember, to imagine within oneself.
2. Receptive Language: One then begins to understand what others are communicating.
3. Expressive Language: One communicates thoughts of one's own.

Inner Language

Inner language: the language for thought within onself.

Inner language is a function of the child's participation in the world; and, vice versa, active participation in the world is increased as inner language grows. It is fostered through the establishment of routines which organize the child's world according to time, through the establishment of a positive relationship with the teacher and eventually with others, through the gradual awareness of similarities and differences, through the making of associations—of cause and

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[1] See Appendix (A) for a list of suggested experiences for language development.

[2] Myklebust, Helmer R., *Auditory Disorders in Children,* Grune and Stratton, 1954, New York, Chapter II.

Olfactory awareness can be developed.

effect relationships—through sensory experiences of every type and variety from which he learns appropriate patterns of reaction.

Inner language is the assigning of meaning and order to things and events of this world. It is the ability to think, to remember, to imagine. Every social contact, every environmental contact, helps him to grow in the knowledge of the world. He must touch, see, hear, smell and taste as much as possible in order to come to know the world, in order to collect a fund of impressions.

This inner language, this meaningful reaction to things, people, and situations, is essential before he can come to communicate or to have an understanding of any symbol in social interaction. He must have something to say before he can learn to express it.

Receptive Language

Receptive language: the language for understanding others.

DEVELOPMENTAL GOALS:

- A. Non-verbal:
  1. Responds appropriately to situational clues.
  2. Responds appropriately to some gestures.
- B. Verbal:
  1. Shows an interest in speech.
  2. Responds to the human voice in a general, meaningful way.

NON-VERBAL RECEPTIVE LANGUAGE:

1. It is natural and easier to respond to gesture, to gross physical movements as symbols than it is to respond to the fine movements of speech in which the clues are less distinctive. A few, specific, symbolic gestures may be employed with the child in order to speed his understanding of communication, to relieve his dependence, to ease his frustration in inability to communicate. These gestures should of course be in addition to the constant exposure to speech.

2. Method:

a. Consistently use a few specific gestures with the child —those few which will be most motivating and useful to him, those which, if used, will produce fulfillment of his physical needs or playful desires; such things as: time to eat, swing, bathroom, bye-bye, going in the car, and so on.

b. Make the associations carefully, clearly, deliberately, with careful timing.

c. In the beginning, associate the symbols directly with the symbolized object or activity; gradually produce the symbol before the activity, thus giving him time to react to it in an anticipatory fashion.

d. Encourage him to make the gesture with your help if he is so inclined, in the hope that he will gradually come to make it on his own initiative.

VERBAL RECEPTIVE LANGUAGE (Pre-Speechreading):

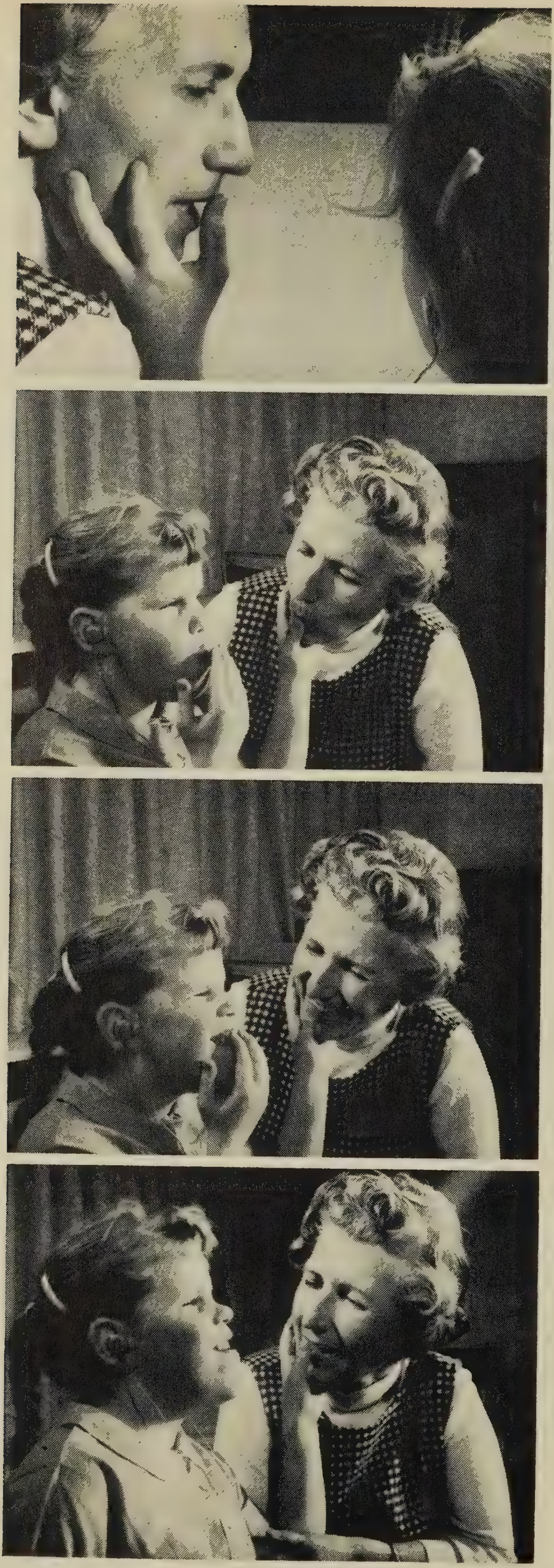
1. At this "pre-school" level, we will be concerned with building a foundation for speechreading. Speech should be given to the child as soon as he is willing to tolerate it and the closeness of the Vibration Technique and as often as he will permit it. It is through this constant exposure to speech that he will eventually come to recognize speech as something useful to him, as communication between himself and others, as a means of exerting control over his environment.

2. *The Tadoma Technique* (Vibration Speech): The Tadoma or Vibration Technique integrates all of the remaining sensory capacities of the child in the perception of speech—any residual sight and hearing, and the kinesthetic and tactile senses. A maximum of clues, then, are present for speech perception; and, similarly, a richer pattern of clues is present to be imitated in building speech production.

Hand placement: The hand of the "listener" is placed on the face of the speaker with the thumb lightly placed on the speaker's lips and the fingers spread on the cheek and upper neck. Small children may more efficiently use two hands, one on the lips and cheek and one on the neck and cheek.

Every hearing handicapped child can benefit from the Vibration Technique since its virtue is in increasing the quantity and variety of clues in speech. Even those children who can rely primarily on visual speechreading should be introduced to the Technique as early as they will accept it.

Speech itself involves a close relationship between people; and the physical contact of the Vibration Technique intensifies the intimacy even more. Therefore extreme caution must be exerted to respect the child's emotional feelings in the use of vibration. Encourage him as soon as possible to use vibration but *never* force him. Instead, help him to grow to trust and to like people so that he can learn to better accept their closeness and so grow to want to be near them and to communicate with them.



Vibration technique

3. Method:

a. General: Speak to him about everything, everywhere, at every opportunity. But, of course, structure your speaking: a) Use simple phrasing, simple words; b) Repeat over and over varying the sentence structure slightly but keeping it simple; c) Speak clearly and a bit slowly, but naturally; d) Time your speaking well, so that your lip movements will be associated with the appropriate action or object; make the association between the symbol and that which is symbolized clear.

Be careful, however, not to become so possessed by the idea of saturating him with speech that you tire him and create an anxious and negative situation, by constantly grabbing his hand to speak to him when he is thoroughly engrossed in a situation. Over-anxiety and over-concern on your part may cause him to become antagonistic toward the whole process. Common sense will draw the line.

b. Specific: His interests are the springboard for the specific words which the teacher is attempting to establish. They will probably be the same as his non-verbal gestures. They should be words which, when produced by him spontaneously, will give him some control over his environment. In other words, stress specific words which produce fulfillment of physical needs or particular desires, such as "swinging" or "ball" if he is particularly interested in these, "eating", "bathroom", and so on—so that the stimulation to understand, to remember, to speak will be more quickly forthcoming due to the tremendous power evident in speech.

Expressive Language

Expressive language: the language for communicating ideas to others.

DEVELOPMENTAL GOALS:

1. Very marked interest in speech—watching or feeling it or both.
2. Babbles—vaguely imitating talking.
3. Succeeds in making his wants known by gross pulling, pushing and pointing in the situations.
4. Uses voice projectively to draw attention to self—gross vocal sounds.

5. Uses gestures to put across simple needs and ideas—with a little less reliance on the concrete situation than earlier.

NON-VERBAL EXPRESSIVE LANGUAGE:

1. A child cannot use a symbol expressively unless he first can respond to it receptively. His first expressive use of non-verbal (or verbal) symbols will be those which he has learned to respond to through innumerable repetitions. At this pre-school level, his expressive language will be extremely limited and primitive.

2. Be alert to his entire behavior as grossly expressive of his feelings. Be alert to vague gestures and sounds made in an attempt to communicate, and build on these—encourage them, expand them.

3. Encourage expressive use of gestures and words by withholding reward or activity until the child responds with an attempt at expressive use of the symbol indicated—*if* you feel that he is ready for expressive language but needs a little additional motivation. This method should be used very infrequently, hesitantly and with full consciousness of the implications involved.

VERBAL EXPRESSIVE LANGUAGE (Speech):

1. Little formal attempt at speech should be made at this level. It should be casual and fun.
2. Encourage babbling.
3. Encourage listening to you talk.
4. You imitate any babbling sounds he makes.
5. If he tries, encourage the speech sounds that he makes; do not be concerned, at this level, with correction of these sounds.
6. Exercises: a few simple blowing exercises and tongue gymnastics may be attempted if the child seems to enjoy it. Do not press the matter if there is protest or lack of interest.[1]

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[1] Tongue Gymnastics:
1. Tongue thrust out and drawn back in rapidly.
2. With tip of tongue touch points outside of mouth, upper and lower lips, and sides.
3. Circular motion with tip of tongue around lips.
4. Tip of tongue touching upper and lower lips as rapidly as possible.
5. Tip of tongue touching points inside of mouth.
6. Place tip behind upper teeth and behind lower teeth.
7. Tongue widened and narrowed in above positions.
8. Have tongue lie flat in mouth. Hold position for—a(r).
9. Thrust tongue out and move from side to side rapidly.
10. Place tip of tongue behind upper teeth and bring it down to a position so that if voice were given, it would be la(r).
11. Tip of tongue touching upper teeth, sides of tongue wide, draw it back into mouth in this position.
12. Tongue thrust out wide, then drawn back slowly into itself, still wide.

7. The Tadoma Technique: It is important in encouraging production of speech sounds by Vibration, to have the child, after he has perceived the sound with his hand on the speaker's face, put his hands on his own face in order to kinesthetically and tactually check his own attempt at production. It is only through this "transfer of hands" that the pattern for imitation may be utilized and that the all-important element of eventual self-correction may be introduced.

PROBLEM SOLVING

A "problem" is a newly encountered situation or set of circumstances causing a state of anxiety and requiring a choice to be made or an action to be performed in order to relieve the anxiety. The solution to the problem may come from the person involved or from the actions of another person. However, every solution actually produced by the person himself (the person having the problem) contributes to the growth of that person and contributes to his learning and independence. In other words, within our particular frame of reference, the child who figures out his own solution to his problem has actually learned something and will profit from the situation—he has learned a new behavior pattern to use in the situation should it arise again. On the other hand, the child who relies on the intervention of an adult to extricate him from the difficult situation learns nothing new from the process; he has nothing to do directly with the temporary removal of his anxiety; when the situation arises again, his behavior will be the same—he will seek the aid of the adult; he has gained nothing except temporary alleviation of his anxiety.

The child's ability to solve problems grows as the child grows as a whole. Growth in problem solving is function of:

1. Inherent intelligence: He must have the ability to perceive the problem in some way, and to use previously learned information and abilities to cope with the new situation.
2. Emotional well-being: He must have the self-confidence to be able to cope with the situation rather than withdrawing from it or waiting for the aid of another.
3. His overall level of development: He must have had an ample variety of meaningful experiences so that he has adequate information to draw from in attempting to cope with a specific situation; perception of a particular problem and the possible solution may require a certain level of intellectual, motor, or social develop-

ment; if the child has not yet reached this level, he cannot be expected to independently solve his problem in a satisfactory manner.

The child's ability to cope with problems is then a measure of both his inherent potential and the teacher's success in developing this potential. Through your common sense and your knowledge of the child's frustration thresholds and his general level of ability and development, you must maintain the delicate balance between giving him your help when he needs it and fostering every ounce of independent action and creative thought in him. While providing him with a stable, warm base of security in his relationship with you, you must encourage him to "strike out" on his own. You must not anticipate his every smallest need; it is only through the encountering and mastering of problems that the child learns. Permit him to *have* problems! Then give him every chance to cope with them himself. It is only through putting into practical use that knowledge and those abilities which he acquires, through trying himself, that he grows and comes closest to fulfilling his potential.

Ability to solve problems grows as the child grows as a whole.

CREATIVE GROWTH

> It is one of my deepest innermost convictions that wherever there is a spark of human spirit—no matter how dim it may be—it is our sacred responsibility as humans, teachers and educators to fan it into whatever flame it may conceivably develop. . . . We as human beings have no right whatsoever to determine where to stop in our endeavors to use all our power to develop the uppermost potential abilities in each individual.
>
> —VIKTOR LOWENFELD

Lowenfeld explains that one of the intrinsic qualities in a child—in man—is the creative spirit (the drive to explore, to discover, to use his ability for new adventures). This creative drive is a basic drive in human beings and, in fact, is the prime differentiating factor between man and animal.

The creative drive is basically as much a part of our deaf-blind children as it is of any human child anywhere. And the fulfillment of the creative drive can be—if permitted—as important to the deaf-blind child as it is for any child in enabling him to lead a happy, rich life. But the potential drive must be nourished. It must be given freedom to develop. It must be given an environment in which it is rewarded and given ever-present opportunities for expression. Hopefully, if properly fostered, the creative spirit will come to find expression in every facet of the child's life, in his every thought and action.

Encourage in the child every sign of originality in action and thought, and place less premium upon imitative responses and conformity. Encourage him to explore, to try new ways and new combinations, to test new relationships of things. Importance must be placed upon the fostering of confidence in his own ability, and upon freedom to try his ability, so that he may come to have his own thoughts and act according to his *own* thoughts and feelings rather than according to imitation of a set pattern of responses established and demanded by his teacher.

CREATIVE EXPRESSION THROUGH MANIPULATIVE MEDIA

One method of giving vent to creative expression is through the use of "art materials" in a way which maximizes the importance of the child and minimizes the influence of the teacher. Creative expression with these materials is play—play with kinds of materials which the child can freely manipulate, mold, or change to produce his *own* effects according to his *own* thoughts, feelings and needs.

Growth in creative expression is, at all times, a reflection of the complex of intellectual, emotional and overall social development of the person. The quality, the intensity, and the character of the child's creative experiences are determined by his degree of awareness of himself and his world, by his feelings about himself and his relation to the world and to other people, by the amount of control he has over his motor movements. With a basic background of knowledge,[1] the child's creative endeavors can profitably be viewed by the teacher as an aid to her in assessing his growth, the adequacy of his thinking, his self-confidence and independence, his needs, and so on.

In addition to being a *reflection* of the child's growth, the experiencing of true creative expression through manipulative materials is invaluable in *contributing* to—actually in making possible—the total growth of the child as an independently thinking and acting personality. The creative experience with "art" materials is essential for him as:

1. *An emotional outlet:* this is a tremendously vital point with our deaf-blind children whose lack of speech so greatly restricts their expression of pent-up feelings.
2. *A vital factor in fostering of self-confidence, independence and self-satisfaction:* So often our deaf-blind children have led for many years very rigidly structured, carefully planned and directed lives; they have been given little opportunity to express their own personalities, to try their own abilities. Through relatively unstructured experiences with these manipulable materials, the child can come to realize that *he* is producing effects, that *he* is changing the material at will, that he has power over it, that *he* can do with it what he wants. He is free. In this way, play with these materials may be the first wedge in developing self-confidence, independent thinking, curiosity and trial in all aspects of his life.
3. *Kinesthetic activity:* Small children *need* gross muscular activity: they seek it; they thoroughly enjoy it; it is a part of growing. The manipulative materials satisfy this need for release of motor energy in gross muscular activity.

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[1] Suggested references:

a. Lowenfeld, Viktor, *Creative and Mental Growth,* The Macmillan Co., N. Y., 1957 (3rd ed.).
b. Lowenfeld, Viktor, *Your Child and His Art,* The Macmillan Co., N. Y., 1957.

4. *Building awareness of bodily feelings, awareness of self:* It must be that a child becomes conscious of himself, of his own bodily feeling, before he can begin to relate to the environment in any meaningful way. The kinesthetic feeling involved in the manipulation of these materials brings about this bodily awareness. The child is directly involved with the material—the sand presses on his hands, he feels the water actually pushing against his arms, the clay really squishes between his fingers, and so on. The kinesthetic experience is immediate, clear, and very personal. He gradually becomes aware of his body, of himself.
5. *A means of objectifying his experiences:* Later, perhaps not during his period in the Readiness Program, he will begin to represent, first the human form, and later, objects. He is beginning to communicate with himself; he is remembering. By putting his experience into representational form, he can look at the experience apart from himself. He is growing emotionally and intellectually.

Introduction to the Material: Activities involving imitating, copying, or requiring only repetitious movements are *not* creative activities and are little—if any—value to the child. These stereotype activities are the equivalent of "Parroting". We do not advocate this robot approach to "art". We want the child to produce of and for himself. Therefore, when introducing the child to the materials, you do *not* show him or direct him in the rigid sense which these words imply. You initially guide him because he will probably be uncertain and afraid; but you, as soon as possible, withdraw and leave him to his own inclination. Guide him into the material by putting your hands over his and moving them—both of you together; then encourage him to "go" alone; if he will not, guide his hands briefly again; give him every chance to take over as *soon* as possible. In moving his hands in these introductory steps use movements appropriate to the child's level; for example, do not draw in the finger paint but make large circular movements with both hands; do not model an object out of clay, but break it, squeeze it, pound it, and so on. Make your part in the activity as minor and as brief as possible. The activity is only beneficial to the child when he manipulates the materials freely himself.

It is the child's activity, his involvement with the materials, that should be important both to you and to him. Unless conditioned otherwise, he will naturally be concerned with the process, not the finished product. We should attempt not to interfere with this natural feeling. Little fuss should be made over finished products. We should encourage him to please himself, not to please us. Great applause of his finished work may actually curb the creative growth of a child lacking in self-confidence; rather than trying new ways and new ideas, he may only repeat the product from which he received so much approval. This is *not* conducive to real creative growth.

List of Materials: Following is a list of materials which *every* deaf-blind child should have the opportunity of experiencing to the limits of his satisfaction, not just once or twice. Of course, crayons and paint are of no interest or benefit to the totally blind child. The materials are listed in four sequential groups with some suggestions for teacher-child introduction to the material. Of course, a child does not move to a new material to the exclusion of the former one; observation of his behavior should indicate to the alert teacher when he has lost interest in a material.

GROSS KINESTHETIC ACTIVITIES:

Water:

—can make it swish, can splash hand down on top, can pour it from hands, and so on.

—child can feel his weight against the water; builds awareness of body.

Damp Sand:

—dig holes; build hills; fill pails; empty pails; makes ditches; pour water on sand.

Mud:

—make mud; squish between fingers; pat it; build it into piles.

—reacts much as does clay.

Soft Clay:

—squeeze; "poke" holes; pull it apart.

Finger Paint:

—make big sweeping movements with arms and hands; circular movements; up and down movements; short discontinuous movements.

—use paint thickly, so it really has a texture, a "feel", to it.

—allow child to choose one color to use at first; when he is ready, he will later try several colors, and be interested in the results of accidental mixings of color.

—he will be interested at this point in the feelings of the movements in the thick paint, not in design possibilities.

—is of a very minimum interest to totally blind children.

"SCRIBBLING":

Scribbling is still gross kinesthetic activity for its own sake; but a little more control over the materials is achieved than previously. Non-handicapped children scribble between the years 2 to 4.

Crayons:

—allow child to choose the crayons he wants to use.

—use large paper (18 x 24 inches) and large crayons.

—there are stages in scribbling; gradually the child gains more control, becomes interested in color, uses different types of lines, and more varied patterns.

—the non-handicapped child eventually begins to name his "scribbles" or to tell stories about them. Because the deaf-blind child cannot do so at this young age, it is difficult for us to appreciate this step in his development; because he is restricted in experiences and does not benefit from reinforcing communication situations, he seems to stay in the scribbling stage for a longer period than non-handicapped children.

Clay:

—no plasticene should be used; it is very hard and is not easily manipulated by the child; it inhibits his play.

—pound, knead, pull it apart, make balls, make coils, squeeze several pieces together, pound "pancakes", poke holes.

Poster Paint:

—work flat rather than on an easel, using large paper and at least half inch brushes.

—he will be sloppy at first and he should be permitted this luxury; he is fascinated by this new material and should not be expected for a time to clean his brush carefully on the side of the jar, or not to dribble paint a bit. Provide him with a "painting shirt" and give him an area in which he need not be neat.

—provide a brush for every jar of paint, and make available a variety of colors at all times.

—he will at this stage be interested in color for color's sake, in combinations of colors, in discovery of color patterns.

Finger Paint

BEGINNING CONSTRUCTION:

Plasticene Constructions:

—use plasticene to stick things together and to stick things into.

—a variety of odds and ends should be available for him to experiment with: sticks, pegs, stones, spools, metal pieces, pegs, beads, wire, marble, paper, pieces of cane, and so on.

Blocks:

—have blocks of many different cubic sizes and shapes; as well as the conventional cubic blocks, pieces of wood of odd shapes and pieces of board should be in abundance.

BEGINNING OF REPRESENTATIONAL FORM:

The non-handicapped child begins to represent forms between 4 and 6 years.

Crayons:

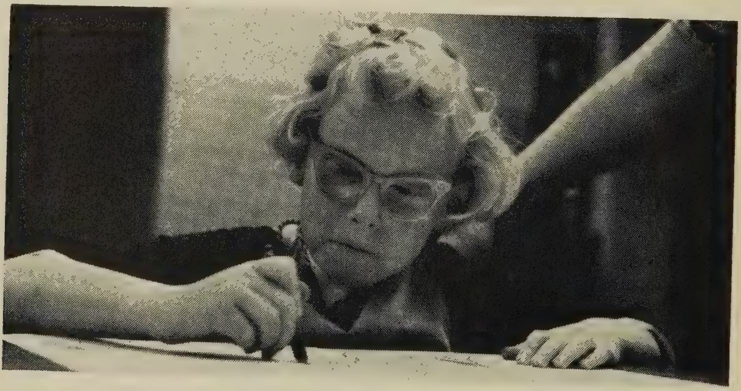
—will begin to draw first the human form. One cannot predict exactly when this will occur or exactly what makes him begin. Usually he will start with the head, then add two lines for legs, and so on—gradually refining his concept of the body image.

—later, as he becomes more concerned with things outside of himself, he will begin to represent other people and objects.

Poster Paint

Clay

Learning based on conditioned imitation has its focus upon the product, upon the stereotyped response. It tends to be rigid, has little transfer possibility, and is merely un-thinking habit forming. Learning based on a creative point of view has its focus on the process as well as the product or response; it values and fosters the individual and his uniqueness; it is vital, ever-expanding, ever-growing. It is our goal to attempt to provide for these deaf-blind children a school environment which keeps the imitative repetitious type of pseudo-learning at a minimum and is as conducive to creative learning and growth—to fulfillment of the individual child's potential and uniqueness—as is possible within the limits of a residential, institutional setting.



APPENDIX

Exemplary List of Experiences for Language Development:

Every activity described in the several categories of social development in this Program contribute to language development. In addition to those discussed previously, there are a great number of experiences which the normal, pre-school child encounters effortlessly through his vision and hearing and his ability to freely move about, but which the blind child does not necessarily naturally encounter and learn about unless effort is made to help him to come in contact with them and to learn about them. Following is a list of some of the many experiences which the teacher should help the young deaf-blind child to learn about. In some instances, exposure to the experience is all that is needed; in others, a demonstration of function or of process may be necessary. In every instance, the child must be permitted to experiment, to explore and to actively participate in the experiences to the limits of his capability and to as great an extent as is practical in the particular circumstances.

SUPPLEMENTARY LIST OF BASIC LANGUAGE EXPERIENCES

HOME AND/OR SCHOOL:

Parts of Room:
—doors, windows, walls, ceilings, closets, curtains, carpets, floors.

Kitchen:
—refrigerator—note shelves, ice compartments, handle; put water in it to get cold; make ice cubes; look at food in it.
—cupboards—find dishes for meal or for recess.
—sink—hot and cold faucets; wash dishes.
—utensils—find and put away in drawers; note their individual uses; actually examine a cup, a bowl, a spoon and so on.
—stove—cook food (note quality and taste of food before and after).
—chairs—compare heights.
—toaster—make toast.

Garage:
—storage areas—see what is kept there.
—car—examine part of horn, wheels, trunk, number of doors, windows, windshield wipers cleaning off rain or snow.

Bedroom:
—parts of bed; make bed.
—bureau—drawers for different items.

OUTDOORS:

Growing Things:

—trees (with and without leaves; note leaves on ground), bushes, grass, flowers; plant a flower seed and grow plant; growing food.

Animals:

—adult and offspring.

—see animals eat.

—see where animals stay.

—cows give milk; you can ride on a horse; chickens lay eggs.

—fish—experience with "life" in classroom—feed it, and so on. Go fishing; eat fish.

—dogs—contrast big and little, long and short hair, long and short tails and ears, and so on.

—cats.

Means of Locomotion:

—scooter and bicycle and sled.

—car: examine parts.

—bus: pay money; many people ride on it; has doors in front and in back.

—milk truck—examine inside; see milkman drive up in it and bring the milk.

—trucks—can carry various things; ride in back of truck.

Water:

—liquid state—pond, row boat; ocean, beach, wet and dry sand; rain, note puddles, everything wet, umbrella keeps you dry.

—ice—slide on it; look at icicles; make ice from water, outside and in ice box; ice skating on pond.

—snow—eat it; make snowballs; roll in it; bury things in it; slide; make snowman; bring some in house to melt.

Earth:

—dig a big hole; fill it up.

—land contour—roll down hills; climb hills, run down them.

FOOD:

Growing:

—apples on tree, grapes on vine, tomatoes on plant, carrots in ground; pick them and eat them immediately.

Peeling and Unwrapping:

—banana, orange, peanut, candy wrapped in paper.

Cutting:

—cut potatoes or carrots in small pieces; cut up orange for eating with fork.

Raw Food:

—carrots, potatoes, eggs, chocolate.

Cooking:

—carry out simple cooking experiences after the food has been seen and tasted in its original state. Carrots, potatoes (mash or fry or bake), hot chocolate, cookies, jello, fry or boil or scramble eggs.

Canned Food:

—open cans; taste food; cook it.

CLOTHES:

Types of:

—compare various people's clothes for type and size.

Washing:

—expose him to washing a shirt immediately after he has spilled food on it.

Drying:

—hang washed things up to dry; take them off the line.

Iron:

—see shirts before ironing, all wrinkled; watch adult iron; look at shirt afterwards on hanger.

Repair:

—witness simple repair—sewing on button, mending hole.

CONTAINERS:

Explore possibilities of baskets, paper bags, boxes of all sizes and types, squeeze plastic tubes, bottles, cans with tops that fit on, cans with screw tops, jars with screw tops.

FASTENINGS:

Doorhandles to turn, pull up windows, window catches, hooks and eyes, slide type of door fastener, key to door, and so on.

SEASONAL CHANGES:

Note contrast of sun and absence of sun (shade) on body and on objects.

Fall:

—no leaves on trees; crunchy leaves on ground; pick apples and grapes; find pine cones and acorns.

Winter:

—ice and snow experiences. Note wearing apparel.

Spring:

—grass and flowers; buds on trees; blossoms on fruit trees; muddy ground; if possible—note melting ice on pond; plant seeds in schoolroom.

Summer:
—swimming; hot sun; contrast wearing apparel with winter wear.

PLACES AND PEOPLE:

Stores:
—buy things with money.
—different kinds of stores; food, clothing, toys, shoe repair.
—carry things away in boxes and bags.

Preparation for Visits:
—(to doctor, nurse, dentist, barber or hairdresser for haircut). When possible, through pictures and/or acting out, the child should be made as aware as possible of pending visits to the above facilities. Many difficulties can be avoided if the child is prepared beforehand, and if cool, calm handling is fostered during the visit. Sometimes, seeing another person—teacher or fellow student—experience the happenings can be helpful.

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Landmarks in the History of the Education of Deaf-Blind Children

October 1837 Laura Bridgman, just two months short of her eighth birthday is entered at Perkins. Dr. Howe teaches her himself. Laura becomes the first deaf, blind and mute child to acquire an education. News of this brilliant success travels far and wide. . . . From this time on, Perkins was never without at least one deaf-blind pupil.

January 1842 Charles Dickens, accompanied by his wife, visited Perkins and "did not deign to notice anything or anybody except Laura" who inspired him so greatly that he devoted much of a chapter in his published *American Notes,* to praising her and the accomplishments of Dr. Howe.

1887 In Alabama the Kellers read Dickens' *American Notes* and appeal to Dr. Howe's successor, Michael Anagnos for help. As a result Annie Sullivan leaves Perkins to teach Helen Keller.

1889-1893 Helen Keller and Annie Sullivan in residence at Perkins.

1890 Helen Keller learns that Ragnhild Kaata, a deaf-blind girl in Norway, had been taught to speak by the oral method of instruction. Helen begins a long period of instruction in speech which, while never wholly successful, gave her the ability to communicate with relative freedom and to engage later in lecture tours.

1900-1904 Helen Keller studies at Radcliffe College and is graduated with the degree of B.A. She begins a life of service to the blind, deaf, and deaf-blind of the world.

1931 Miss Inis B. Hall introduces the Tadoma Method of teaching speech by vibration to the deaf-blind children at Perkins.

1932 Dr. Gabriel Farrell organizes the program for deaf-blind children into a special department at Perkins, headed by Miss Hall.

1942 Miss Hall leaves to take charge of the instruction of deaf-blind children in the California School for the Blind.

1953 A Conference of Educators of Deaf-Blind Children is held at Perkins in May, resulting in the formation of the National Committee on Deaf-Blind Children. . . . Perkins Trustees announce a program to enlarge the Department for Deaf-Blind Children to include teacher-training and research.

1956 With the cooperation of Boston University School of Education Perkins announces the first graduate-level training program for training teachers of the deaf-blind. A program of research with our children is also inaugurated at this time. . . . From this time on, with more trained teachers available, the Deaf-Blind Department increases in size very rapidly.

July 1962 An International Conference on the Education of the Deaf-Blind is held at Condover Hall School for Blind Children with Additional Handicaps near Shrewsbury in England. Representatives of eleven countries in America and Europe attend.

Perkins releases a film entitled *Children Of The Silent Night* dealing with the Deaf-Blind Department. The film rapidly becomes popular both in the United States and overseas where its influence is considerable.

1964 The Perkins Deaf-Blind Dept. includes a professional staff of twenty-seven and a large number of attendants and household staff to care for thirty-eight deaf-blind children.

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Educational beginnings with
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